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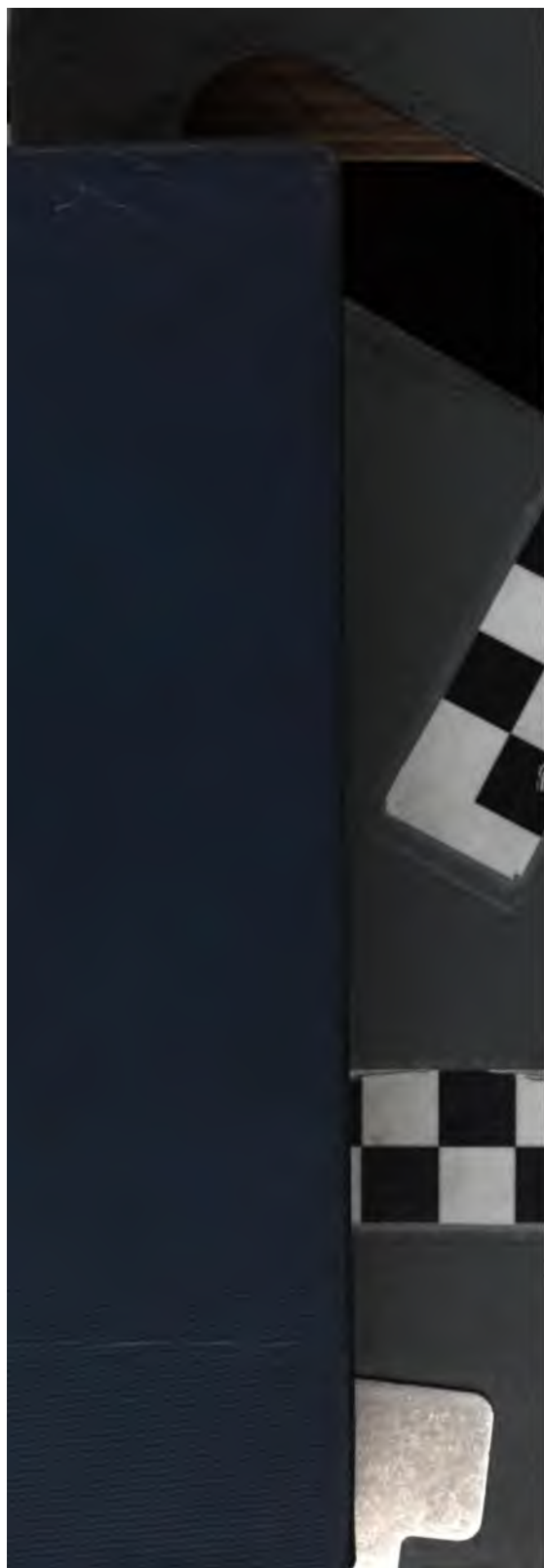
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THE FIELD OF PHILOSOPHY





THE FIELD OF PHILOSOPHY

AN OUTLINE OF LECTURES ON INTRODUCTION TO PHILOSOPHY

BY
JOSEPH ALEXANDER LEIGHTON

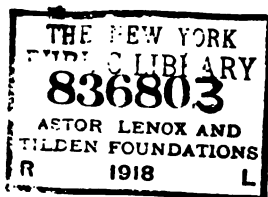
Professor of Philosophy in the Ohio State University

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PREFACE

The following work has been prepared primarily for the use of classes in The Ohio State University. I hope it may be found of service elsewhere.

For some years past I have experimented and pondered as to the best method of giving an introductory course which might really introduce beginners to the basic problems and theories of philosophy and quicken them to some appreciation of the role played by philosophy in the whole movement of civilization, while, at the same time, giving them at least an inkling of the work of the greatest thinkers and arousing in them a desire to go to the sources.

A course in the entire History of European Philosophy, if seriously given, is beyond the reach of many beginners in the subject. Only the exceptional student can make much out of it. The others are bewildered by the rapid succession of theories not easily distinguishable and become confused as to the fundamental issues and standpoints. They are likely to carry away from the course the feeling that philosophy has no close relation to culture and everyday experience and that it is a bewildering mass of speculations "shot out of the blue". The History of Philosophy should be a second course.

On the other hand a purely topical and systematic introduction fails to bring the student in contact with the great historical doctrines in other than the scrappiest fashion. Moreover, the miscellaneous and varied characters of the intellectual backgrounds of students who elect a first course in philosophy make it imperative to supply something in the way of a common background and also, at the risk of being dogmatic, to indicate the main directions in which solutions of the chief problems of philosophy may be sought.

The present outline is thus a combination of the historical and the systematic methods of treating the great problems and theories. Its plan is to discuss systematically the chief problems and standpoints of modern philosophy from the vantage point acquired by a rapid sketch of the most significant stages and types of philosophical thinking from the primitive world view up to the beginning of modern thought.

My conception of the structure of an introductory text is that it should be in the nature of a comprehensive outline — an extended syllabus — to be filled in by the teacher in his lectures and by the student in his collateral readings. Therefore, I have avoided discussing the more technical and finely-drawn distinctions within the main types of doctrine that would be dealt with in a more elaborate treatment. The teacher who uses this book can easily select and make omissions from the material presented, according to his tastes and the needs of his classes.

It would not have been possible for me to bring out this preliminary edition now, had not my colleague, Dr. R. D. Williams, generously volunteered to report my lectures. Mr. W. S. Gamertsfelder, Fellow in Philosophy, was good enough to type the reports, and I have revised them. Nearly two-thirds of the book is a transcript from lectures. Dr. Williams and Dr. A. E. Avey have rendered valuable assistance in proof reading. To them I am much indebted also for preparation of the index. Dr. Williams has also aided me in several places with illustrations and references.

Some haste in preparation for the press was necessary, in order to have the book ready for the use of the classes in the present semester. I shall be grateful for any criticisms and suggestions that may help me in the preparation of a second and revised edition.

JOSEPH ALEXANDER LEIGHTON.

Columbus, Ohio,
February 15, 1918.



CONTENTS

	PAGE
CHAPTER I. Philosophy, Its Meaning and Scope.....	1
1. Definition of Philosophy.....	1
2. The Relation of Philosophy to Practical Life, Especially to Conduct and Religion	4
3. Methods of Religion and Philosophy....	6
4. Poetry and Philosophy.....	7
CHAPTER II. Primitive Thought	9
1. The Primitive World-View.....	9
2. Primitive Idea of the Soul.....	9
3. Tabu	11
4. Magic	12
5. Mythology	17
CHAPTER III. The Differentiation of Philosophy and Science from Religion.....	22
1. The Rise of Philosophy to Independence	22
2. The Development of Early Greek Philosophy	31
CHAPTER IV. The Personality, Mission and Influence of Socrates	43
1. The Personality of Socrates.....	43
2. The Method of Socrates.....	48
3. The Substance of Socrates' Teaching...	50
CHAPTER V. Plato	55
1. The Problem of Truth and Knowledge (Logic)	55
2. The Platonic Theory of Reality (Metaphysics)	61
3. Plato's Doctrine of the Soul (Psychology)	69
4. Plato's Theory of Human Good (Ethics and Social Philosophy).....	70

	PAGE
CHAPTER VI. Aristotle	77
1. Aristotle's Theory of Reality.....	77
2. Aristotle's Psychology	80
3. Aristotle's Theory of Knowledge.....	82
4. Summary of Aristotle's Theory of Reality	85
5. Aristotle's Doctrine of the Good (Ethics)	87
CHAPTER VII. Atomistic Materialism	89
CHAPTER VIII. The Decline of Greek Speculation...	95
CHAPTER IX. Skepticism	99
CHAPTER X. Stoic Pantheism	108
CHAPTER XI. Mysticism — Neo-Platonism	115
CHAPTER XII. Early Christian Philosophy.....	125
1. The Ethical Content of Christianity....	127
2. The Doctrine of the Trinity.....	129
CHAPTER XIII. Mediaeval Philosophy	133
CHAPTER XIV. Realism, Nominalism and the Problem of Individuality	140
CHAPTER XV. Modern Philosophy: Its Spirit, Its Chief Problems and Its Standpoints....	148
CHAPTER XVI. The Problem of Reality.....	155
CHAPTER XVII. Dualism	159
CHAPTER XVIII. The Scientific Notion of Material Substance	167
CHAPTER XIX. Materialism	173
CHAPTER XX. Spiritualism or Idealism.....	178
1. Berkeleyan Idealism	178
2. Leibnitz' Monadology	182
3. Hegelian Idealism	188
CHAPTER XXI. The Identity or Double Aspect Theory	191
Summary	192
CHAPTER XXII. Singularism and Pluralism (The One and the Many).....	195
1. From Naïve Pluralism to Singularism..	195
2. The Spinozistic Conception of the Absolute	205

CONTENTS

xi

	PAGE
3. The Hegelian Conception of the Absolute	210
4. Further Implications of Singularism...	216
5. Criticism of Singularism.....	219
6. Pluralism	221
7. My Own Standpoint.....	223
CHAPTER XXIII. The Problem of Evolution and Teleology	230
1. The Rise of the Doctrine of Evolution..	230
2. The Method of Evolution.....	235
3. The Mechanical and the Teleological Aspects of Evolution.....	239
CHAPTER XXIV. The Self	252
CHAPTER XXV. The Fundamental Concepts of Metaphysics	270
1. Substance	272
2. Causality	273
3. Finality and Individuality.....	278
4. Order, Law, Relation and Individuality	280
5. Space and Time.....	287
CHAPTER XXVI. Epistemology	293
1. The Problem of the Sources of Knowledge	294
2. Knowledge and Reality.....	305
3. Critical Realism or Teleological Idealism	308
CHAPTER XXVII. The Criteria of Truth.....	314
1. The Copy Theory of Truth.....	314
2. Pragmatism	315
3. The Rationalistic Theory of Truth.....	325
CHAPTER XXVIII. The Special Philosophical Disciplines — The System of Philosophy.....	330
1. Psychology and Philosophy.....	331
2. Logic	334
3. Ethics and Social Philosophy.....	336 ✓
4. Aesthetics	339 ✓
5. The Philosophy of Religion.....	341
CHAPTER XXIX. The Status of Values.....	345
CHAPTER XXX. The Philosophy of History.....	364

	PAGE
APPENDIX — Current Issues in Regard to Consciousness, Intelligence and Reality.....	389
1. The New Realism.....	389
2. Neutral Monism	396
3. The Instrumentalist View of Intelligence	399
4. Irrationalistic Intuitionism	403

ERRATA

On page 69 line 18 § 2, for "next lowest part" read "next lower part."

On page 85 lines 3 and 4 for "The organization," etc., read "In the organization of sense experience the mind uses" etc.

On page 103 line 1 for "Differences" read "Variations."

On page 105 line 8 for "cause" read "course."

On page 214 line 24 for "purporsive" read "purposive."

CHAPTER I

PHILOSOPHY, ITS MEANING AND SCOPE

1. DEFINITION OF PHILOSOPHY

The word "philosophy" is derived from the Greek words "philein" meaning to love and "sophia" meaning wisdom. Hence the true philosopher is a lover of wisdom.

The philosopher strives, as Plato so finely puts it, to attain a synoptic vision of things, to see things as a whole or together, that is, to see all the main features of experience, life and conduct in their inter-relationships. The philosopher strives to be "the spectator of all time and existence." This does not mean that the philosopher must compass in minute detail all knowledge and all experience. It means rather that, in trying to reach a unified and consistent view of things, the philosopher will not neglect to consider the general significance of any of the main fields of human experience, knowledge or conduct.

Plato distinguished between Ignorance, Right Opinion, and Knowledge or Wisdom. Ignorance is not to know, nor to know why you do not know. Right Opinion is a belief which corresponds to the facts but is devoid of reasoned insight into its own foundations. Knowledge is belief with reasons. If one knows wherein his own ignorance lies or the limitations of the possibilities of the subject, he

may be rightly said to possess knowledge of the subject.

Philosophy is more fundamental and comprehensive than science, otherwise they are identical in their aims. Philosophical knowledge has these three characteristics: —

1. It is fundamental knowledge.
2. It is most comprehensive or generalized knowledge
3. It is most unified and consistent knowledge.

The aim of philosophy is to discover the full meanings and relations of Truth, Beauty, and Goodness and to determine their places in the universe of reality. Philosophy is an attempt to interpret reflectively human life in all its relations. The philosopher aims to "see life steadily and to see it whole." Plato says "the unexamined life is not a truly human life." Philosophy is rational reflection upon experience, belief, and conduct. It is closely related to science, conduct and religion.

Science is a careful scrutiny of the grounds of our common sense beliefs. It analyzes and describes our common experiences. It is organized common sense. The special sciences are the children of philosophy, and can never replace philosophy. Among the Greeks philosophy included all science. In fact Aristotle was the first to map out the field of knowledge into distinct sciences. In the course of intellectual history the various sciences have gradually been split off from philosophy in the following order — ; mathematics, astronomy,

physics, chemistry, biology, psychology and sociology.

1. All sciences make assumptions. Philosophy examines these assumptions.
2. The mutual adjustment of the principles of the several sciences into a unified and coherent view of things is a philosophical task.
3. The adjustment of the principles of science and the principles and beliefs which underlie the practical conduct of life is a task of philosophy.

The data of the sciences are really *sense-data* or perceived facts. In reducing these data to orderly and compact bodies of conceptual description and explanation, science makes assumptions. These basic assumptions of the sciences, philosophy must critically examine; e. g., the uniformity of the causal order—like causes produce like effects. Moreover, it is generally assumed in the practical affairs of the common social life that each individual is responsible for his own acts. But if we are machines, as the physiologist might assume, this is not true. Philosophy is thus a clearing house for the sciences, adjusting their several conclusions to one another and to practical life.

In brief, the assumptions and conclusions of the several sciences call for critical examination and co-ordination, and this is a principal part of the work of philosophy. For example, what are Matter, Life, Mind, Space, Time, Causality, Purpose? What are their interrelations? Is the living organism

merely a machine, or, is it something more? What is the mind or soul, and what are its relations to life and matter? What are Space and Time? Is the world really boundless in space and endless in duration? What are the enduring realities? Or, does nothing really endure? What is the status of purpose in the universe? Does everything that happens happen blindly and mechanically? Are our human beliefs in the permanent significance of the purposes and values achieved by the rational individual illusions? What may we hope for in regard to the realization and conservation of the highest human values? Such are the exceedingly difficult and important questions to which philosophy seeks reasoned answers.

Judgment should not be passed as to the meaning of human life and its status in the cosmos until all the evidence is in. The one fundamental faith or postulate in philosophy is that nobody can be too intelligent. Great evils have come in the past through lack of intelligence.

2. THE RELATION OF PHILOSOPHY TO PRACTICAL LIFE, ESPECIALLY TO CONDUCT AND RELIGION.

Natural science is impersonal and indifferent to human weal or woe. It is not concerned with the *values* of life; it is essentially non-human. Material progress does not necessarily mean improvement in human nature.

There is, besides the physical realm, the human realm or the realm of human values. Two kinds of human values may be distinguished, viz.: —

1. Instrumental values, which are of use as means to realize ends;
2. Intrinsic values realized within the self, experiences valued in themselves or for their own sakes.

The good life is the life which contains great intrinsic or satisfying values. Ethics deals with intrinsic values or goods for selves. Ethics is thus the philosophy of intrinsic or immediate values. Aesthetics, dealing with the *beautiful*, is also a part of the philosophy of values.

Religion claims to answer the question: How do values endure? The life that is best is the only one that endures, on account of its harmony with the supreme purpose of the universe,—such is the central tenet in religion. All religion is faith in the supremacy in the universe, and therefore the permanence, of the best life, the life having the most worth. Religion is close to conduct because it attempts to give firm foundation for the intrinsic values of life.

The atheistic or materialistic view of the universe is that blind physical forces will finally overcome human existence and effort, and engulf all human values. Philosophy is interested in what nature is, but also in what are the values of life, and what is the status of the highest human life, i. e., philosophy asks: What is the status of values in the real world?

What are the highest values of life, is the problem of ethics, an important branch of philosophy. Religion affirms dogmatically that what a

society or individual members thereof regard as the highest values are promoted and conserved by a Higher Power. Religion pictures the highest values of life as incorporated in the Supreme Reality or Perfect Power who rules the Cosmos.

3. METHODS OF RELIGION AND PHILOSOPHY.

The procedure of philosophy is intellectual, finding reasons for our beliefs and rejecting beliefs that are inconsistent with facts or with well-grounded principles. Religion is not primarily intellectual. It is based chiefly upon tradition and feeling. The factor of personal need may change one's religion. The influence of social tradition and the sentiments of the group together with personal feeling chiefly determine a man's religion. Seldom does the individual break away from the religion of the group. The method of philosophy is sustained rational inquiry. *Philosophy originates and flourishes in the rational activity of the individual mind. The group-mind is seldom guided by reason.* The scope of philosophy is wider than that of religion. Philosophy must determine not only the nature and meaning of religion, but also its relation to the principles of the sciences and to life.

Philosophy has two main problems, viz.: —

1. The interpretation of nature, and,
2. The interpretation of human values.

Why the conflict between religion and philosophy? Religion is conservative and philosophy is not conservative but radical and constructive. Since

religion is based largely on social customs and personal feeling it is not always very careful as to whether there is consistency in its beliefs or not. Philosophy seeks consistency above all things else.

Does philosophy make assumptions? No.— But it has progressively realized that there is some kind of intelligibility in the world, that the world can, in part, be understood, and that we have experiences which, if properly interrogated, will yield answers to our questions.

4. POETRY AND PHILOSOPHY

The more serious poetry of the race has a philosophical structure of thought. It contains beliefs and conceptions in regard to the nature of man and the universe, God and the soul, fate and providence, suffering, evil and destiny. Great poetry always has, like the higher religion, a metaphysical content. It deals with the same august issues, experiences and conceptions as metaphysics or first philosophy. For example, Aeschylus, Sophocles, Euripides, Pindar, Lucretius, Omar Khayyam, Dante, Milton, Shakespeare, Coleridge, Wordsworth, Matthew Arnold, Browning, Tennyson, Goethe, Schiller, Moliere, are philosophical poets. Poetry is more concrete, vivid and dramatic in its treatment of these high themes; it is more intuitive in its thought processes and expressions than philosophy; hence it makes a more direct appeal to the emotions than philosophy. A philosophical poet is a metaphysician who does not think in a predominantly conceptional and ratiocinative manner. A meta-

physician is a poet who cannot think in concrete pictures, or, if he can, is unable to express himself in rhythm, color and swift movement of speech as does the poet, and, at the same time, has a genius for analysis and ratiocination. Sometimes, as in Plato, a genius is supreme in both orders of spiritual creativeness and then we get the absolute best in the spiritual realm, the profoundest thought wedded to the noblest expression.

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CHAPTER II

PRIMITIVE THOUGHT

1. THE PRIMITIVE WORLD-VIEW.

Although prehistoric man has left no records of his inner life, the earliest literature throws light on primitive views and the facts entitle one to assume that savage belief and thought today is very like primitive belief and thought. This assumption is supported by the study of the earliest literature of civilized peoples, of savage lore, and of the theory of evolution.

Primitive man believed that everywhere in the world everything was alive,—there was a universally diffused energy. The world was not orderly to him, it was only alive. Man had not yet arrived at the distinction between animate and inanimate things. Moreover, he had no conception of personality. Wherever anything was *done*, there was *life*. This theory may be called pan-biotism or animatism (a better term than “animism” which seems to imply the idea of a soul differing in kind from the body).

2. PRIMITIVE IDEA OF THE SOUL

Primitive men do not think of the soul as immaterial. The soul has no specific mass or weight. It is of much more tenuous material than the body. It is an active principle. But it is not different in

kind from the physical objects with which it is associated. It differs only in degree. It is elusive. It can leave the body and enter into other bodies. It hovers around after death; so food and drink are given for it. Many primitive peoples do not regard the soul as being generated with the body. The Australian savages, it is said, (according to Spencer and Gillen, "Northern Tribes of Central Australia",) do not regard generation and birth as a result of the sex relation. They think the child is the result of a pre-existing soul — a reincarnation. Many consider the soul as a manikin, like an image or a shadow of the body. Mysterious powers are attributed to a person's shadow. Savages are often afraid to have their pictures taken because their souls might be harmed by exposure on the photograph. The soul is sometimes conceived as like a bird, also as air, e. g., by the ancient Hebrews and Romans. Nervous affections, they believe, are caused by strange spirits.

The causes for making a distinction between and a separation of body and soul were reflection upon dreams and visions of terror and delight, the mysteriousness of death, disease and misfortune, and the feeling of being environed by mysterious forces potent for good and evil.

The third conception is that of spirits. The great spirits were believed to be free from the hampering influence of ordinary physical events. A striking phenomenon will cause the supposition of spirits. Some spiritual agencies are beneficent and others are maleficent. The high spirits would be

called the high gods. Most savage tribes believe in a creator god, remote and inaccessible.

Primitive man draws no clear distinction between man and animals. Totemism considers some animals sacred. The totem is an animal having a mysterious connection with the origin and well-being of the clan or tribe. Members of a totem clan do not kill the animal of their totem except under special circumstances. They must marry out of their totem. Plants, too, are supposed to be controlled by the spirits. Moreover the spirit of ancestors may or may not be deified.¹

3. TABU

This is an important item in primitive beliefs. Anything which is tabu must not be touched. It is set apart — sacred. A prohibition of any kind of food is tabu, e. g., with the Jews, pork, and with the Hindus, the cow. To violate tabu would bring injury to the clan. A woman after childbirth is tabu, also a dead body. At puberty, boys and girls are tabu. The person of the king, and even words, may be tabu.

¹ The distinction between soul and spirit is not sharply drawn in primitive thought. The distinction between body, on the one hand, and mana soul or spirit on the other hand, is made in terms of *behavior*. Anything that behaves in an unusual or unexpected manner has mana soul or spirit in it. The arrow, fishing spear or canoe that behaves queerly is possessed by mana or spirit. The body is that which behaves in the ordinary fashion. At the points where social groups behave or need to behave in an unusual way the great spirits or gods are conceived and invoked.

Why are things tabu? Because there is believed to be some mysterious power (in Polynesia called *mana*, among the North American Indians, *wakanda*, *orenda*, *manitou*), resident in them or associated with them in some way, which, if the tabu is violated, will work injury to the violator or his tribal associates. Anthropologists employ the word "mana" to designate the mysterious force or influence which primitive man believes to be widely distributed through nature and which operates through all sorts of objects.

4. MAGIC

One of the most striking features of primitive conduct is the belief in and use of magic. Magic consists of various special devices and procedures through which control of the mysterious powers which surround man is obtained for the advantage of the group or the individual.

Out of the technique of primitive magic has arisen two very different types of technique. One is the technique of science which aims, by the use of delicate and standardised instruments of observation, measurement and calculation, such as fine balances, micrometers, microscopes, microtomes, dividing engines, statistical tables and algebraic formulas, at acquiring an accurate and economic intellectual control or shorthand formulation of the order of nature. The other is religious technique, which aims, by its symbols, rites, prayers, et cetera, at bringing into right relation with one another the human group and individual on the one hand, and

the Supreme Power, who is the custodian and dispenser of the values on participation in which depend individual and social well-being, on the other hand. In brief, religious technique aims at vital, moral and spiritual control. Both these techniques have grown out of primitive magic which was primitive science and religion in one. Religion and magic became differentiated as religion came to embody more clearly and rationally the organization of human values into a coherent and socialized whole, and thus to furnish explicitly the motives and sanctions for a higher social-moral order; while magic, incapable of development into an agency of social moralization and rational spiritualization, remained merely a technique for the satisfaction of isolated interests and irrational passions. The Hebrew-Christian and the Greek lines of development are most instructive and significant in this regard.

Magic is the ancestor of technology, the ancestor of what we call applied science. Medicine springs from it. The individual medicine man or Big Medicine among the aboriginal inhabitants of this continent was a man who, by reason of special ability and training, was able to do things that the ordinary individual could not do in the way of controlling mysterious forces of nature. The word "medicine" was applied not merely to what we call medicine, but to rain making, cloud making, wind making, getting strength into the war party, harming their enemies, etc. When we want anything done in what we call the arts of technology,

we go to a special individual, e. g., physician, engineer, carpenter, plumber, who has a special training. The medicine man was a man technically trained and able to control mysterious forces. Of course, the ordinary member of the tribe as a hunter, fisher, etc., had his training, and he could do the ordinary things in the ordinary way. But if he wanted anything special done, he went to the medicine man — the Shaman.

Two kinds of magic are found, i. e., two kinds of magical control, viz.: —

1. Contagious
2. Homeopathic.

The basis of the belief in contagious magic is that power is transmitted by contagion, by contact with some being in whom this power resides. That belief is the source of one of the most wide-spread and solemn ceremonies in religion, the partaking of the god in the sacred meal — the banquet with the gods.

Where totemism exists, we find that, whereas ordinarily the individual would not kill the animal, a certain part of that animal is eaten in the sacred meal and strength is derived therefrom. Cannibalism is partly due to this. The savages did not always eat the bodies of their enemies because they were hungry. Possibly they had plenty. But if the enemy were particularly strong, they would get some of the strength by eating their bodies. And similarly, if the individual or the tribe, not being able to get hold of the whole persons of their enemies, could get hold of some parts of them, they

could do them deadly injury. If you have the hair, clothes, scalp-lock, et cetera, you have the enemy in your power. The magical power of names of birds was due to the supposition that power resided in the names.

The other form of magic is homeopathic. Not only like cures like but like causally affects like. The original dogma of homeopathy is found deeply imbedded in primitive thought. So, if you could not get hold of anything belonging to your enemy, you might make an effigy and vent your anger on it. This practice has come down to modern times. Primitive man believed that he was hurting the original by injuring the image. Rain making, wind making, cloud making, the dance, imitating the corn planting, imitating the activities of war and the chase, — these procedures were means of tapping *mana*, the mysterious force pervading nature.

As a familiar instance of homeopathic magic, I would cite the story of the brazen serpent. The Israelites on the way through the wilderness were attacked by a plague of serpents, and the brazen serpent was the means of curing that plague by homeopathic magic.

There is a tendency to believe, and there are people who still believe, in the efficacy of the bones of the saints, even the very small bones and fragments of their garments, to cure diseases. People still believe that by a few words a priest actually transforms bread and wine into body and blood. Some people, especially the peasantry of Europe, have recourse to love charms and to injurious magic.

In the course of the development of civilized society, a differentiation took place in the magic, between black and white magic. The rulers and the people of Israel were forbidden to have recourse to soothsayers. We find in the Middle Ages in Europe a belief in black art, black magic, evil eye, and various forms of witchcraft, a belief which is still in existence in the minds of a good many people who still live in the Dark Ages. Many students of that subject have argued that from the first there was a fundamental difference between magic and religion. I believe they have one origin—the belief that superhuman agencies may be employed for either human ill or weal. The differentiation into magic and religion takes place gradually. Those special and mysterious methods, through which the mysterious powers which environ man are controlled, are placed in some person or group of persons. Of course, whatever ceremony or deed is for the welfare of the group is good. But now the individuals who want to satisfy their desires, their loves and hates as individuals, will have recourse to magic to gratify a passion which may disturb the order of the group. An individual, for example, falls in love and has recourse to a magician to get another person as a husband or wife, which may be bad for the social order. One has a grudge against an individual and tries to bring him to destruction. There thus arises a difference between anti-social magic and religion. Magic in general is a specialized kind of method for obtaining control over these mysterious forces that surround and invade the life of man.

5. MYTHOLOGY

Among all primitive peoples and in the early literature of civilized peoples we find a great variety of stories to account for the origin of the various things in the world and to account for how things took place. Man asks from the beginning, *why* and *how*? Why and how, are the questions which we try to answer by science and philosophy. Myth is the lineal ancestor of science and philosophy. Myths are stories invented to account for that which exists, to account for the world, for man, and for his various customs and beliefs — in short, to explain why and how. We have, for example, cosmogonic myths, stories to account for the origin of the world, and anthropogenic myths, to account for the origin of man. Then we have stories to account for the origin of culture. We have culture heroes.

Death is not regarded as a natural affair by primitive man. Death is believed to be due to the intervention of some malevolent or at least not well disposed power. Normally it should not take place. So we have all through history crude explanations of death, as e. g., the influence of the serpent, the devil, sin. Now the fact that many of the stories seem very childish should not blind us to their purpose. St. Paul said: "When I was a child, I spake as a child, I felt as a child, I thought as a child; now that I am become a man, I have put away childish things". At the time of the origin of these myths, mankind was in a state of intellectual childhood.

The savage gave free play to his imagination and was not checked by any acquired body of scien-

tific principles and of scientific methods of procedure. Nor was he checked by the evidence of the validity of these principles. Consequently he thinks in pictures, and just as he interprets the phenomena of nature in the way we have seen, so he must make use of his own crude, disjointed picture-thinking to account for the origin of things. For instance, today, if anybody asks a scientist how man came on this earth, the scientist will say that he descended from an ape-like ancestor who lived in trees and later developed language, invented fire and tools, and organized societies. That is the evolutionary explanation of the how of things. We say that the earth was formed through the condensation of a nebula, or through the aggregation of meteoric star dust on the little core of the planet. Development or evolution by natural processes extending through immense periods of time and proceeding from the simple to the more complex — such is our evolutionary doctrine of the origins of the earth, animals and man.

When we come to the higher types of myth as to the origin of things, we find two main kinds or types, — though not all, perhaps, can be thus classified. One type of explanation of the origin of things is that they are due to a male and female principle. It is very obvious why man would explain things in terms of his own experience, as due to male and female powers. Another type is the notion that from the beginning there were two opposing natures in things. The whole process of creation is due to the conflict of these principles. This notion em-

bodies on a cosmical scale that conflict which is so universal a feature of common life. The Chinese, for example, have two principles, Yang and Yin — light and darkness. And I do not think that they regard these principles as male and female. They are opposed principles, positive and negative. All things have sprung into being from them. The ancient Persians have two conflicting principles. Sometimes in Persian literature we find the view that these two principles sprang from the same original source; but on the whole the Persian thought is that two opposing principles worked, viz., Ahura Mazda and Ahriman.

We find, among other peoples, various conceptions confusedly intermingled. For example, one myth is that the sky is the female principle and the earth the male principle, and from these all things came, from a primeval chaos. Without any consistency, the ancient Egyptians believed the separation of earth and sky was due to the sun. They forgot their own myths of the genesis of the sun by the earth and that the sun was formed from chaos. Another conception was that the sun god is the father of gods and men.

The Hebrew and Babylonian myths have a fundamental similarity. They both presuppose a primeval chaos. Tiamat is the primeval chaos. The Babylonians conceived it as water. And the origin of things was due to Marduk. In the book of Genesis it is stated that "in the beginning God created the heavens and the earth", the meaning being, not out of nothing, but out of chaos. And the

word that occurs for this primeval chaos is Tehom — “the abyss”. There is no question but that the story of genesis in the book of Genesis is an elevated form of the Babylonian story.

It is of special interest to note briefly the features of some of the main Greek cosmogonies because mankind emancipates itself first from this confusion we are dealing with among the Greeks. Homer does not represent a very religious point of view. Some of the actions of the gods as depicted by Homer aroused the ire of Plato and other philosophers. Of course, we are not to take these seriously. The book was compiled in the present shape in a very sophisticated civilization tinged with skepticism and irony. The original beings in Homer are Oceanus—heaven, and Tethys—earth. But behind both stands the goddess Night. The Orphic cosmogony is similar. Water and land are the offspring of earth and heaven.

Two other stories are worth noting. Hesiod says that all things sprang from chaos, which meant space. From space first came Gaia, the earthly mass and Eros—love or desire. Then sprang Erebus and Night, then Ether—day. Pherecydes brings in a trinity the first member of which is an eternal spiritual principle. The first and mightiest is Zeus; then comes Chronos—time. From Chronos sprang fire, air, and water. The third principle is Chthonia, Earth-Spirit. These three seem to be alike eternal, although Zeus is the most powerful and, as Zeus-Eros, is the principle agent in creation.

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CHAPTER III

THE DIFFERENTIATION OF PHILOSOPHY AND SCIENCE FROM RELIGION

1. THE RISE OF PHILOSOPHY TO INDEPENDENCE

The first influence that made for independent intellectual inquiry into things was the break-down of the primitive world view. In order that man may understand and control the forces operative in the world, it is necessary that he discover the sequences among phenomena. Now when man discovers that there is regularity of sequential relations among phenomena, that is a discovery of what we call the causal relation, that is to say, one thing is invariably dependent for its appearance on other things. The regular antecedent is cause and the regular consequent is effect.

From the beginning man must have tried, in so far as he exercised his intelligence, to discover causal relations, and, as I have pointed out, the primitive world view is a theory of the causal dependencies, of the regular sequences of events. And from that theory there follows certain practices. Magic and religion aim at methods of control over the causes of things. Surrounded by mysterious forces that affected him, that operated on him for weal or woe, early man formulated a theory of the characters of these forces from his experience. He regarded things that affected him as expressions of

forces, spirits, gods, as mysterious or supernatural operations, and devised means to control them. Science today is concerned with the same problem. But between our science and practice and the beliefs and practices of primitive man lies the whole history of science and philosophy as independent enterprises.

There are three fallacies to which the primitive man was prone. There are many fallacies, but these are the three most prevalent and persistent. The modern man is still a prey to them. A training in scientific habits of investigation and of persistency in analyzing things into their elements, is to get rid of the influences of these fallacies. These are:

1. "Post hoc ergo propter hoc".
2. The neglect of negative instances.
3. Classification by means of superficial resemblances.

The fallacy of "post hoc ergo propter hoc" in English means this: That because we once or twice observe one thing to follow another, therefore that which follows is the effect of that which it follows upon. Conversely, that which we have occasionally observed to immediately precede an event is the cause. Because of man's native propensity to jump to conclusions, a single instance of a sequence will be taken as evidence of a causal dependence. His primitive and persistent credulity makes such a belief, once formed, very difficult to dislodge. The superstitions that still prevail among human beings, especially feminine beings, are due to the persistence

of primitive causal theories and beliefs that owe their rise to this fallacy. For example, that it is unlucky to take journeys on Friday; certain things bring bad luck; thirteen is an unlucky number, because disasters have occurred when something was done on the 13th, or thirteen were at the table, — these are instances of primitive causal theories.

Now, suppose the members of a tribe were starting on a hunting expedition and something unusual happened, as e. g., there was a great clap of thunder, a brilliant flash of lightning, or strange birds flew across the sky. Anything strange arrested attention. To primitive man, anything that is mysterious has supernatural significance. They started out with that in their minds. They went on and were defeated, or did not get game, or the game turned on them and some of them were killed. Immediately the conclusion followed naturally that there was a causal connection, that they should not have started, or that they should have propitiated the spirits who sent the birds or the lightning. We only are able to eliminate these fallacies by a thoroughly exact analysis which leads us to determine that there is some *constant* relation.

Now as to the fallacy of making further observation suit one's already formed belief and neglecting the negative instances. having observed that once or twice A follows B, the conclusion that A *always* follows B is made, and men never look for the instances in which A occurs and there is no B; and they never try to analyze A and B to separate

relevant from irrelevant factors. The tendency to neglect negative instances is a consequence of that primitive tendency to believe what one sees in the lump, without further inquiry. Suppose, for example, you believe in the prophetic significance of dreams. Whenever a dream occurs that turns out to be even vaguely anticipatory of a later occurrence, you will chalk it down and other dreams will be overlooked. This is often the sole source of belief in the efficacy of certain therapeutic methods. You take some medicine and get well. The medicine may have had nothing to do with it. Nature cures ninety per cent of ills. So the doctor, no matter what the trouble is, has a tremendous advantage over the credulous patient, because when a person is in distress, physical or mental, and looks for some remedy, and is told by someone else that something is good, whether faith healing or medicine, immediately, if he gets well, the patient concludes that it was the consequence of the advised remedy.

The following is a story from the ancient Greeks. A certain Greek was skeptical as to the power of Neptune — in Greek Poseidon — to really control the waves. A friend took him into the temple and showed him a large number of votive offerings that had been put into the temple by sailors and fishermen who had called upon Neptune and the sea had become calm. This proved the case to the pious believer. But the skeptic said, "Before I make up my mind I would like to hear from those who were drowned", that is, to hear the negative instances of those who had called upon Neptune in

vain. It is very hard for humankind not to make up its mind until it hears from the drowned. Most people tend to jump to conclusions.

The third persistent fallacy is classification by means of superficial resemblances. Identity of nature and operation is attributed to things that look alike in outline or behavior. A stick, a stone or a cloud looks or moves as an animal or man might, therefore it is animated by similar motives. The trees in the forest or the wind at sundown or dawn make sounds like the voices of men or animals, therefore they are alive. Animatism has one of its most powerful supports in this mode of reasoning which is, of course, the primitive form of the *argument from analogy*. Resemblance or analogy furnishes one of the permanent modes of arranging facts in order, but we must *weigh* as well as count the points of likeness and balance them, as to both weight and number, against the differences. This precaution the primitive mind commonly fails to observe.

What leads to the break-down of faith in the primitive world view? The development of civilization; the growth of social organization; the establishment of stable, well ordered states; the development in the arts of life; agriculture and the industrial arts. When civilization develops so that it includes a large number of families with stable civic organization and advance is made in agriculture, works of architecture, engineering and the household arts, and especially when one people comes into contact with other peoples and observes dif-

ferences in customs and arts, keen minded individuals make discoveries. They discover that the primitive theory does not work; that good crops do not always follow on the propitiation of the gods; that success in war does not always follow upon the propitiation of the deities and supernatural powers. They discover that beliefs running back to immemorial antiquity are often a hindrance to the welfare and progress of the individual and the group. In other words, a question arises as to the validity of these beliefs, because they do not produce the results expected. In fact they may produce bad results.

By familiarity with the qualities of natural objects gained through manual work, men discovered that there is a regularity of sequence and a constancy of behavior in things and that you can get certain results by taking account of certain qualities. It is discovered that by rubbing amber you can get sparks and if you do not rub, no incantation will bring forth the sparks.

The development of political life through the organization of strong and stable states leads to higher moral conceptions. Some of the old customs are seen to be hindrances to the proper conduct of business, industry, and to proper administration and the progress of the social order. The development of social life in stability, the growth of justice, the definition of property rights, rights of contract, the growth of man's whole moral and social life as a member of society, brings to pass an increasing recognition of the significance of the personality of

the individual. There is more leisure, more opportunity, more scope for exceptional individuals, for inventors and critics of the established beliefs and customs. The discoveries of new ways of thinking are always made by individuals. Masses of men never discover anything, never invent anything. It is always the exceptional individual who creates new ideas and values. The crowd is irrational, imitative and subject to the influence of suggestion. Therefore, the type of society in which there is development, scope and stimulation for the exceptional individual, is the type of society which progresses most rapidly in the arts and sciences, which progresses intellectually and spiritually.

So far as we are concerned, we belong to the European culture system. Our culture is a continuation of the European culture, and what I have to say about the genesis of philosophy and science will have no reference to the history of India or China. Up to the present time China has had no influence on the development of our culture, and India has had hardly any. So it is the development of European science and philosophy, of which we are the heirs, that I am concerned with.

The earliest important civilizations were along the rivers — in the fertile river valleys. Babylonia and Assyria attained a high degree of development in written language, social organization, agriculture, and the mechanical arts. Some of their architectural achievements are still sources of wonder, and their social and religious ideas were the ancestors of some of the most fundamental ideas of the Hebrews and even of the Greeks.

The next period of civilization after the river period was the Mediterranean. The shores of the Mediterranean were naturally favorable environs for the development of civilization. It is not very large, the shores are near enough together to promote traffic, the climate is good, there are clear skies, varied rocky shores, fertile plains and picturesque river valleys. Apparently in the island of Crete there developed a high degree of civilization, the Minoan civilization. Crete was one center of advancement, but it was not confined to Crete. Asia Minor, the Hellespont, and other contiguous regions had their share in it. This civilization spread over the whole region and probably over a large part of the Mediterranean.

There came down upon this early civilization and conquered the representatives of it, a people whom we call the Greeks and who call themselves Hellenes. They were in many respects less highly civilized than the people they conquered. They were Aryans, the race which we belong to. The Greeks had certain common features in their physical build, the shape of the head, et cetera, which characterized them.¹ A great advance in civilization, I think, has always involved intimate contact of two peoples. An isolated people does not advance. And the contact of the Hellenes with the other peoples stimulated the Hellenes. It gave them

¹ Perhaps the invaders were of the same racial stock as the more civilized people whom they conquered. This is an unsettled question.

material to work on, and they worked in a favorable environment. The geography of the eastern Mediterranean is favorable to the development of human culture. There were beautiful promontories, inland mountains and valleys, good climate and plenty of sunshine, which afford favorable conditions to stimulate humankind. The economic conditions were also good, material wants were easily provided for in a genial climate and with slave labor.

This is where we find the origins of science. Why were the Greeks so keen and creative? Originally, why did they possess such eager curiosity, such fertility of thought? They must have had them from the first, to some extent. Somehow, in their racial characteristics, there was a capacity for more advanced civilization. They inter-married with the aboriginal inhabitants. The most progressive races are always mixed races. The parents of science and philosophy are the Greeks. Science and philosophy's first independent disciples appeared about 600 B. C.

The Greeks were traders, industrialists, travelers. One of the richest Greek cities of that time was Miletus, the birthplace of science and philosophy. Thales of Miletus, who flourished about 585 B. C., was the first philosopher and physicist. His school was called the Milesian School. Of his school were Anaximenes, who flourished about 540 B. C., and Anaximander, who flourished about 570 B. C.

2. THE DEVELOPMENT OF EARLY GREEK PHILOSOPHY.

Thales said that the first principle of things, the substance or stuff of all things, was water. This does not seem like a very significant statement. The cosmogonies had already said that Oceanus was first. We have traditions that Thales did various things. He was a mathematician and astronomer and foretold an eclipse. He cornered all the oil presses, showing his business shrewdness. But for our purpose, the important point is, what is the significance of the theory that the substance of things is water? Thales held that every finite thing that comes into existence is a modification of water. He held the view that by condensation and rarefaction of water all things rise, and he actually attempted an evolutionary account of the genesis of man, and plants and animals. Thales regarded the substance, water, as having in it life. None of these early thinkers recognized any distinction between living and non-living, or mental and non-mental. They believed that every particle of the substance of things had the germ of life in it. They were all Hylozoists. They were all, in a broad sense, Evolutionists.

Anaximenes said air or the ether is the substance of things. Anaximander said that the unlimited (to apeiron), a boundless animated mass, is the substance of things.

Why does Thales' theory constitute the birth of independent philosophy and science? First, it is a *natural principle*, one natural substance or principle, and not a multitude of mysterious spirits;

an *empirical substance* is made the stuff and cause of all things. Second, Thales, I think, was undoubtedly led to his view by observation and reflection upon the mutations that water undergoes, its rarefaction and condensation. It solidifies into ice and rarefies into vapor. It enters into so many things, into rocks and breaks them. Things die without water, with enough water they flourish. Thales lived on an island in the Ægean Sea off the coast of Asia Minor, and his situation possibly suggested his hypothesis that water was the basic and all-inclusive substance of things.

Herein lay the significance of the first theories advanced by the Ionians, Thales and his disciples; these theories all have this in common, however otherwise they may conceive the one substance, that they consist in the notion that there is *one* natural substance, stuff, material, out of which all things are fashioned, and that the whole variety of particular things which exist, animals, plants, men, as well as rocks, air, ocean, the whole variety and the endless succession of actual beings, are fashioned out of the one natural substance, the primeval stuff which is not conceived as merely material. Its material characteristics are most obvious, but it is dynamic and living, and is distributed throughout the entire world, and all things arise from it through the operation of natural causes. So this one substance is living matter (Hylozoism).

Now once a conception of this sort has been definitely formulated and shaped, there are several questions which logically arise. And the first ques-

tion which arises is this: What is permanent amidst or through all the ceaseless changes in particular beings? If the primeval stuff is constantly undergoing modification, then it never exists as such in the form in which it is conceived. What is it that is permanent? That is the first question. The second question is: What is the cause, or the causes, of the ceaseless flux, the endless modification of things, things arising, changing, passing away, and new ones arising? The clearness and consistency with which various Greek thinkers raised and tried to answer these questions, once they hit upon the trail, is a mark of their genius.

One of the greatest thinkers, Heraclitus of Ephesus (538-475 B. C.), a city of Asia Minor, on the coast, answered the question by saying that nothing is permanent, all is change, ceaseless flux is the nature of things. There is no substance that retains the same characteristics and qualities. The world of nature is the theater of incessant mutation, "panta rei", πάντα ῥεῖ, all things flow. But all change takes place in an orderly fashion, according to the eternally fixed law or decree — Logos, which in Greek means both word and reason, or thought expressed.

This conception of Heraclitus is the ancestor of our doctrine of natural law. So far as the actual course of particular things is concerned, their unending fate is ceaselessly to arise and to pass away, but this fate is not the expression of the wills of animated beings or spirits, nor is it the result of

chance. *It is the expression of rational order in the universe*, and that rational order Heraclitus identified with God — Zeus.

Now as to the *causes* of change, the doctrine of Logos or Reason or Universal Law means that there is no disorder. *There is nothing that happens without reason or cause.* As to the question, what is the ultimate cause, what in the last analysis is it that keeps things going, why this constant cyclical process of generation and decease, Heraclitus says strife is the father of all things finite. Struggle or conflict is an inexpugnable feature of reality. This old Greek thinker anticipated by many centuries the Darwinian doctrine of the struggle for existence, as well as Hegel's doctrine of the development of reality through conflict. "War is the father and king of all things". The world is the theater of the ceaseless conflict, with ever varying results, of two opposing tendencies, the tendency toward discord, and the tendency toward harmony. But whichever may be in the ascendancy at a particular time in a particular region of the universe, whichever may have the upper hand, whether it be peace or war, all takes place according to law, according to reason, according to the eternal divine order.

As to the *stuff*, the *substance* of things, Heraclitus regarded fire as the best symbol, the nearest approximation that we have in experience. That may be conceived as the primary stuff. This is one radical solution of the problems of the relations of change and permanence, multiplicity and unity.

But another equally radical solution and way to get rid of the problem of the opposition between the ceaseless changes that the world shows and the permanence of the primary stuff, is to say that there is no such thing as change. And this is the way that Parmenides of Elea, who flourished about 475 B. C., solved the question. For him the substance of things is one and unchangeable. Consequently, all the changes which we see are illusory, and all the multiplicity that we see in things is illusion. There is no motion or change in reality, that too is an illusion of our senses. There is no growth and decay in reality, and there is no plurality of beings, there is one and only one substance — “*hen kai pan*”, *ἐν καὶ πᾶν*, the One and All.

Parmenides was probably stimulated by Xenophanes who was a religious poet. He was especially interested in the religious aspect of philosophy and insisted that there was but one supreme and divine being. He criticised the popular doctrine of the gods, saying that the Ethiopian's gods were Ethiopians in color and made in the image of the worshipper himself, and that an ox's god would be like an ox. He criticised the attribution of human qualities to the gods. Parmenides solves the problem of the contrast between permanence and change, unity and plurality, by saying that what we call change, growth and decay, birth and death, are illusions. What we apparently see through our senses, that there exist a multitude of beings, the things I see with my eyes and touch with my hands, all these perceptions are illusions. There

is only one being. He conceived the One as like a material sphere, because the sphere was round and complete. And he defended his theory by arguments, showing the irrationality of belief in change and multiplicity. Zeno, his disciple, with great acuteness, developed a series of contradictions involved in the assumption that motion is real (the Achilles, the flying arrow); that there exists a plurality of beings (the infinite divisibility and the infinite extensibility paradoxes). These contradictions, he says, show the utter untrustworthiness of the senses.

Now, of course, Parmenides and Zeno did not have to solve the problem, what is the cause of change? There is no need for a cause if there is no change or plurality. But they escaped that problem to face another, viz., what is the cause of the illusion that we are all under? What is the cause of the universal belief that there is change and multiplicity? They failed to explain this satisfactorily, and that failure is an immediate factor in developing a consciousness of a new problem, viz., that of knowledge and error. The very difficult and important question arises as to why we should err and how we can know anything, if our senses are wholly untrustworthy.

The Eleatics solved the problem of permanence and change by eliminating change. Heraclitus solved it by making change universal and by affirming that the only thing which is permanent is the law and order of change. Another series of thinkers tried in various ways to combine the two

notions. Empedocles of Agrigentum (495-435 B. C.) advanced the theory that there are four elements. These are permanent:—earth, air, fire and water. He took these from the myth-makers, his predecessors. These are the permanent and original things. The succession of particular beings that constitute our world is due to the intermixture of these elements in various proportions. They are always being mixed and separated, combined, dissolved and recombined. And he conceived every particular thing as a mechanical mixture of the four elements. As to the cause of this intermixture, he says there are two forces that exist through all time, they are eternal—Love and Hate. This is a more pictorial form of Heraclitus' doctrine of harmony and discord. And because love and hate are always striving against one another, is the reason why we have in nature the ceaseless succession of all sorts of things and events. It is worth noting that Heraclitus, Empedocles and others believed that the course of the universe runs in cycles.

Leucippus was the founder of the atomic school. The mere fact that Leucippus first formulated the theory of atoms marks him as one of the most important thinkers that the world has ever seen. Leucippus' theory, more fully developed later by Democritus, was that that which is permanent is an indefinite number of indivisible particles of matter, the atoms. These are indestructible, they never came into being and never can pass out of being. They exist in space. Why do they exist? There is no why. Space and

atoms are the original and indestructible constituents of being. The atoms differed in size and shape, and consequently in weight and mass. In tumbling about in space, they jostle one another and become compacted in various ways. The whole course of things is due to the ceaseless blind dance of atoms in space.

Anaxagoras of Clazomenae (500-428 B. C.) was another early Greek thinker who formulated an original theory of permanence and change, or unity and multiplicity. Like Empedocles and Leucippus, his idea was that the substance of things consists of indestructible elements. His elements he calls seeds, spermata. Aristotle calls them homoiomeries — like parts. Anaxagoras says that, when we analyze our perceptions, we find a very considerable variety of distinct qualities. We have, of course, to begin with, the qualities perceived through the senses; colors, shapes, sounds, tactual perceptions, temperature sensations, etc. Besides that, when we dissect a living being, we find different kinds of stuff or structure, bones, nerves, blood-vessels, muscles. That is the starting point of the doctrine. Corresponding to every quality that we find, there is an indefinite number of minute parts or elements which have the same qualities. Bone is made up of bone parts, nerve of nerve parts, muscle of muscle parts, heat of heat parts.

We can smile at Anaxagoras because he did not have behind him the history of scientific analysis, of the minute analysis of things by use of the microscope, test tube, et cetera, which we have. But

Anaxagoras' doctrine of the elements is the ancestor of the modern chemical doctrine. The chemist, as a chemist, does not say that he can reduce all the elements to the same kinds of atoms. The physicist says that all the chemical substances may be composed of the same primary stuff, and if he is a metaphysical physicist, he is now apt to say that they are constellations of electrons. But the chemist simply reduces the physical world to things that cannot be further analyzed by chemical methods.

The elements of Anaxagoras represent the not further analyzable qualities of the world, and he regards these qualities as due to the presence of a large number of minute particles which have the same qualities. That is, the substance of things, and all the ceaseless variety of beings which exist in our world are due to the intermixture and separation of these elements.

As to the cause of these ceaseless processes of inter-mixture and separation, Anaxagoras is quite original. He says that these things cannot move of themselves. There must be something which moves them. He says we know that, when our bodies undergo a change, when we move our bodies, it is because there is a mind causing the body to move. As to the cause of movement, therefore, he argues that, just as you and I intentionally move our bodies, and through moving our bodies move other things to a limited extent, so there is a universal mind which is the cause of movement. He calls this *Nous* — *Universal Intelligence*. He does not

conceive this mind in a strictly immaterial way, and he does not, so far as the preserved fragments of his teaching show, work out the difficulties and problems of how mind can act on matter. He does not even apply his theory of mind as the prime mover, except when he can find no other explanation. Mind imparts only the original rotatory movement to things.

You may ask for the difference between Anaxagoras' view and the primitive animistic view. We may say, on the one hand, that Anaxagoras has a clearly defined doctrine of material elements, and, on the other hand, he conceived the universe as a unity, with one universal mind as the first cause of all the motion in the world. Neither of these views, in a clearly defined form, were present in the primitive animistic view of the world.

All of these conflicting theories, in more elaborated form, have engaged men's attention throughout the centuries, since the doctrines of one or more natural substance and cause are attempts to account for the mutation and multiplicity of things in various ways. We have the doctrine of the universal law according to which all change takes place. We have a doctrine of a multitude of elementary substances in place of the homogeneous substance. We have various theories as to the causes of change: the love and hate of Empedocles, the harmony and strife of Heraclitus, and the elements and Nous of Anaxagoras. We have also the very radical doctrine that the whole world of sense perception is an illusion.

The conflict of these various theories brings into the foreground new problems, problems of which man had not hitherto been conscious. The first, was the *problem of knowledge*. The debate between the representatives of these theories begets the critical spirit and man begins to ask himself, what is the relation between my thought and the things I think about, between my senses and the physical world, between my intelligence and the world? The development of the critical spirit means further that the spirit of inquiry does not stop with theoretical questions; more particularly, it takes hold of the questions of belief and conduct.

The critical views of the ancestral mores and religion of the Greeks resulted in the dissolution of the authority of the mores and traditional beliefs. So the problem of conduct becomes a central problem. 'The critical spirit directs the light of intelligence upon the inherited customs and beliefs in matters of conduct, statecraft and religion. So we have the nature and authority of the good, the rules of conduct, and the rites and beliefs of religion, becoming problems of critical study. ✕ When man becomes conscious of the fact that there are problems of knowledge, conduct and religion, and sets about to deal with these problems systematically, then he has become conscious of the central position which his own mind occupies in relation to things. Out of these problems of knowledge, the good and religion arises the consciousness of the problem of spirit, of the meaning and nature of spirit or mind itself. All these problems come to a focus in Plato.

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CHAPTER IV

THE PERSONALITY, MISSION, AND INFLUENCE OF SOCRATES

1. THE PERSONALITY OF SOCRATES

It is impossible to separate the teaching of Socrates from that of Plato. Plato makes Socrates his mouthpiece. It is a difficult and perhaps insoluble problem as to where to draw the line of separation between their doctrines.

Xenophon, who wrote, in his *Memorabilia* of his revered master, an account of the personality and teaching of Socrates, was an upright soldier, but was incapable of conveying an adequate account of the philosophical teachings of Socrates. He conveys only the reverence of an honest soldier for the greatest man he ever knew. In Aristotle also, we have some condensed information as to Socrates. Here we are told that Socrates was the first philosopher to develop deduction and induction as a means of definition; and further, that he was the first to develop the process of division or classification of concepts. There is but little information further than this concerning Socrates in Aristotle.

Socrates was born in B. C. 469, at a time when Athens was passing through the most brilliant period of her history. From 479 to 431 Athens was the most brilliant of all city states. Socrates

died in B. C. 399 by drinking hemlock poison in fulfillment of the sentence of death imposed upon him by the Athenian jury.

Athens had entered upon the greatest period of her history, upon her age of supreme sacrifice and effort; and it was in just such an age that she developed her greatest glory. (The age of Shakespeare, and the present situation in America afford epochs that are quite similar to this). Socrates' work was carried on (as he prophesied it would be) by Plato, the greatest of all prose writers. He in turn was followed by Aristotle, "the master of those who know".

The age of Socrates was one of enlightenment, criticism, an age of keen intellectual activity. This is evidenced by the great activity of the Sophists. This age of inquiry and criticism was succeeded by an age of creativeness. Athens was not only the center of politics and patriotism; it was also an intellectual center. This age in Athens was, in view of its brevity and the comparatively small size of the Athenian state, the greatest intellectual period in the history of the world.

The Sophists, sarcastically so-called by Plato who did not like them, are contrasted with the philosophers as lovers of wisdom, who do not pretend to be wise. The Sophists arose in response to a definite social situation. They were professional teachers in a time when there were no colleges and universities. Plato's Academy was founded and directed by Plato, and it is here that we first find the true features of a university, viz.:

1. Research into all fields of knowledge,
2. The training of men for public service.

Plato carried on his work in the belief that the state could not prosper without using the best trained men that were available. This was the high standard of Plato's Academy. As contrasted with this, in our state life, men of the highest training are often not wanted in public life.

The spirit of critical inquiry was rife in Athens as it was in France before the French Revolution, and as it is in America today. It was an inevitable consequence that in such a situation hoary customs and time-honored traditions and beliefs would be called into question. Students in the colleges and universities of America today, coming into touch with the sciences and philosophy, may be similarly disturbed in their views. But this questioning attitude must be aroused if there is to be personal development and progress. The same is true in the life of a state. Traditions and customs must be critically analyzed and subjected to rational treatment.

The Sophists made many claims, one being that they were able to make the worse cause appear the better. Some of them, notably Protagoras, held the view that man is the measure of all things. There are, indeed, two ways of taking this attitude of the Sophists: First, the individual with all his limitations, i. e., the particular, changeable individual, may be taken as the measure of all things; second, human nature in general, i. e., the immutable and necessary rational and moral element common

to all mankind, may be taken as the measure of all things. If the first view be accepted, then there is nothing objective in our moral distinctions and rules for conduct, and it may even seem that there are no means by which objective truth and good can be ascertained. It was in this attitude that some of the Sophists pandered to the gilded youth of their day and taught them that whatever one may want to do is right. Conservatism took alarm at this teaching. The standpatters of the day maintained that Athens was going to ruin, and that all civic foundations were being undermined.* The solution offered by the standpatters of the day was that this procedure must be stamped out and that the customs of the city state must be blindly and unquestionably accepted and obeyed. "The old is the best", this is the constant attitude of the standpatter.

Socrates saw the danger that would result to the individual and to the state from both of these attitudes. He seeks to use rhetoric and argumentation for other purposes than to justify the momentary whims and opinions of the individual. While men were openly preaching that "might is right" and declaring that the only test of conduct is "does it pay in financial or political success", Socrates saw another way out of the dangers of the situation, viz., not by the cessation of thought, not by a dumb and blind adherence to tradition, but through earnest and persistent thoughtfulness. The way of reason

* See the plays of Aristophanes.

was the only way out for Socrates. The cure for the ills of the day as proposed by Socrates was not the suspense of reason, but the systematic and persistent exercise of reason.

Socrates felt that the Sophists were not in earnest and not intellectually equipped for the work to which they set themselves. He looked upon them as pretenders, fakers, (a goodly number of such Sophists are at large in our country today), men who said one thing to one crowd and something else to another crowd. Their own interest was their constant aim. The trouble with Athens, Socrates saw, was that the leaders had not made a deep inquiry into the principles of conduct and the social order. The way of salvation for the state and the individual, Socrates said, is to think out earnestly the problems of conduct. It was the problem of conduct and not the problems of the early cosmologists that engaged Socrates' attention. He cared only for social and ethical inquiries.

Socrates was a man of powerful frame and of great endurance. He was abstemious in his habits, but not ascetic, and was not given to eating or drinking to excess even though his companions all did so. He was kindly and good-humored, but unflinching in his devotion to the right, noble and magnanimous in temper. He devoted himself whole-heartedly to his mission, and carefully avoided mixing in politics, believing that if he did his life would be shortened. Three times he had the deciding vote on public questions, and at these times he braved the clamor of the multitude and

the voice of authority. He faced death without a tremor. His passions and his body were the complete servants of his rational will. He always regarded himself as entrusted with a mission from on high and as being always under divine guidance. He repeatedly spoke of his "dæmon" or spirit, the supernatural, inner voice, which gave him warning at all the crises of life.

Socrates was accused of the following three charges: —

1. Corrupting the youth,
2. Teaching atheism,
3. Introducing false divinities.

The real causes of the accusation, however, were: —

1. Desire for revenge on the part of the exposed humbugs of the day,
2. The democratic reaction against the tyrants with some of whom Socrates had been closely associated, notably Alcibiades.

Socrates, of all those in Athens interested in the problem of knowledge, knew that he was ignorant. The first step in the acquisition of true knowledge is the consciousness of ignorance.

2. THE METHOD OF SOCRATES.

Socrates' method was directed towards elucidating or educating from the ordinary opinions of men in regard to virtue, the good, temperance, justice, et cetera, consistent and adequate conceptions.

He believed that there is latent or implicit in moral common sense — (in the opinion of the average decent citizen) — sound conceptions in regard to conduct, but that these conceptions are implicit, i. e., not yet thought about. The ordinary man dealt with particular cases as they arose and had not thought things out. Socrates refers to his art as that of an intellectual midwife. He helped men bring forth conceptions that were latent or implicit in their ordinary opinions.

The following will illustrate his method of procedure: Suppose the question to be, "What is justice"? The ready answer came: "Justice is an eye for an eye, a tooth for a tooth, good for good, and evil for evil". Socrates would ask: "Is the man who returns good for evil an unjust man"? His answer was: "No; one sees that such a man is just in a much higher degree". Thus by questions and answers he sought to elucidate universal ideas, aiming to get definitions that were applicable to every concrete case.

Instead of the current sophistical view that the thing to do is simply to do what you feel like doing, Socrates maintained that we must reflect, think, and form rational notions of conduct. We must carry rational thinking through to the bitter end. In doing this Socrates took the definitions given off the bat, as it were, by those who knew (thought they knew), and showed that such definitions did not square with the moral common sense of man. Socrates took a definition, set it up as an hypothesis, and then examined it to see if it stood

the test at the hands of particular cases. He reflected upon facts and the foundations of hypotheses, and sought to test them by concrete cases. Such was the nature of the Socratic method. X

3. THE SUBSTANCE OF SOCRATES' TEACHING.

The substance of Socrates' teaching may be expressed thus: "Virtue is knowledge; vice is ignorance. No man willingly does evil; every man seeks the good." This seems to be an extraordinary statement. Offhand we would say it is false. "I see and approve the better, but I do the worse"; this statement we would approve. There is a wide gap, we think, between knowing and doing. We ordinarily believe we know what is right. We often say, "where ignorance is bliss, 'tis folly to be wise". We often think that knowledge produces corruption, and that it is wrong to think upon certain sacred matters and other matters that are evil. Socrates held that there could be no permanently good and useful conduct that is not guided by sustained thoughtfulness and that knowledge earnestly sought and used would never lead to evil.

If Socrates were here today, he would doubtless say that what we call knowledge he would call degraded knowledge, or even not knowledge at all. Our handing out of cold storage pabulum to blindly accepting pupils is not the true way of imparting and acquiring knowledge. Knowledge for Socrates was personal insight which men acquire by their own persistent activity. No one has any genuine knowledge which he has not discovered for

himself. We find no peptonized, predigested, after-breakfast knowledge-tablets in Socrates. Belief must cost the sweat of the intellectual brow, or it is not knowledge. It was knowing that had reference to conduct that chiefly interested Socrates. If one persistently endeavors to find out what is right or wrong, one will do so, for he has put his whole personality into the quest. Knowledge that has to do with conduct is only attainable through an active quest; it is the result of a voyage of self-discovery. This voyage of self-discovery must be made by each individual for himself. Only such knowledge is knowledge at all in Socrates' view.

In literature we have some magnificent presentations of persons like Milton's Satan, who knew the difference between good and evil and deliberately chose the evil. Satan says: "Evil, be thou my good". Such an attitude Socrates would regard as impossible. He would say that Satan must have mistakenly regarded *ruling at any cost* as the highest good. In short Satan's choice Socrates would regard as based on a lack of true insight into the good. And indeed, the prevalent notion is that goodness requires little or no reflection. This is the very opposite of Socrates' view. This view is only the exaggeration of a great truth. Enduring good must be built on knowledge. There has been more evil wrought in this world by ignorant fanatics than by all the wise devils. This conception is strictly in line with Socrates' teaching. There is urgent necessity for the application of knowledge to the conduct of daily life, and it is the little attention

that has been paid to the theoretical problems of conduct and social organization that is perhaps responsible for our present international situation. This generation needs to be reminded that Socrates has lived. We are puffed up with knowledge about everything, but we have gained but little knowledge about the social and political conditions of good conduct, and as a consequence of this we are using knowledge in that most stupid business of blowing each other to pieces. By our industrial processes we have increased a thousand-fold productivity in material things, but we have not learned how to distribute these goods equitably so as to increase the common weal.

Socrates' conception of goodness was this: Goodness consists in the health or harmony of the soul; it is the subordination and organization of the appetites and impulses under the guidance of reason and the good. This, said Socrates, is the truly useful. There is nothing of use that is comparable to the welfare of the soul.

There is a view current that philosophy is useless, since it does not tell us how to pile up riches, win law cases, achieve political preferment and operate machines. Socrates would doubtless ask us today: "Of what use are your machines, your vast riches, your thousands of pairs of shoes made over a similar pattern, your fast trains, your telegraph lines, your telephones, and motors"? We might reply: "See how luxuriously we live, how sumptuously we fare, how fast we ride, and how readily we communicate with each other"! But Socrates

would reply: "Does all this contribute to the health and harmony of the individual? Does it add to the poise and harmony of the people"? The health and harmony of the soul are the only ends that are supremely worth seeking, and thus the good alone is truly useful.

In matters of religion Socrates never spoke disrespectfully or lightly of the finer aspects of the traditional forms of Greek religious life. Evidently his own belief was that there is but one divine being or principle — the guardian of righteousness — the moral governor of the universe. The deepest article in his own faith was this — "No evil can happen to a good man either in this life or in any to come." A supreme righteous order rules in the universe, and ultimately no harm can happen to a good man. It is, indeed, far better to suffer than to do an injustice. To return evil for evil is to injure one's own self. Such were the moral intuitions of Socrates. Coupled with these he had also a strong hope of immortality.

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CHAPTER V

PLATO — 427-347 B. C.

HIS METHOD

Plato extends the Socratic method of enquiry to other spheres such as mathematics and the physical sciences. There were four great problems which Plato attempted to solve, viz.: —

1. The problem of truth and of knowledge (Logic and Epistemology).
2. The problem of the nature of ultimate reality. (Metaphysics and Philosophy of Religion).
3. The problem of the soul. This is the problem of philosophical psychology.
4. The problem of values, i. e., what is the good for men in society, and by what kind of conduct and social organization can the good be attained? (Ethics and Politics).

1. THE PROBLEM OF TRUTH AND KNOWLEDGE (LOGIC)

In the skeptical theory of the Sophists, knowledge was derived from sense perception. Truth is therefore simply what you taste, touch, smell, feel, see. This theory Plato criticised. If this is the nature of truth, he argues, then there is no truth. The pig or dog-faced baboon is a measure of truth

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equally with the wisest man. Indeed "wisest" has then no meaning. This view denies that there is any test or standard of truth. Thus these skeptics, by saying that there are no standards of truth, refute themselves. If there is no truth this statement itself is not true.

Plato does not deny that sensation is a factor in our knowing. Sensations furnish the stimuli by which we are led to think. True knowledge, however, is the soul's conversation with itself. By this Plato meant that knowledge is arrived at through the activity of reason or of thought, and not through the senses alone. The senses furnish the stimuli and the material for knowledge, but this material must be reflected upon before we can have knowledge.

Plato insisted that knowledge is reminiscence. Inasmuch as we are unable to account for knowledge in terms of the senses and inasmuch as we have knowledge, the soul must have been born with an inherent capacity for it and only gradually does the soul awaken to a consciousness of the knowledge that is implicit in its own being. Plato is here formulating the view that true thinking is not something derived from, but applied to, sense perception. True knowledge is not to be explained as the result of sensation or sense perception. We do not apprehend the contents of true knowledge through the senses alone; there must therefore be an inborn capacity in the soul which comes to consciousness through the stimulation of sense perception. Sense perception is merely the occasion

for getting knowledge, but there is no possibility of deriving knowledge from the qualities of sense perception alone. This position of Plato is expressed in Wordsworth's "Intimations of Immortality" when he says:

"The Soul that rises with us, our life's Star,
Hath had elsewhere its setting,
And cometh from afar:
Not in entire forgetfulness,
And not in utter nakedness,
But trailing clouds of glory do we come
From God, who is our home:"

Consider some of the kinds of knowledge that Plato has in mind. Knowledge of relationships is one kind or type. Relationships are not proved through the senses. Suppose that we deal with the properties of a triangle. We say that the three interior angles are equal to 180 degrees. Draw as many triangles as one chooses; they all differ in size, shape, et cetera, and of them all we say that the three interior angles of any triangle equals 180 degrees. But it is not true of these particular triangles as we measure them, for we cannot measure them absolutely. All actually figured triangles are more or less than we define them to be. We cannot draw a line having no breadth. Thus all the way through the complete body of mathematical relations, there is something absolute about these relations that is not perceived by the senses.

Note briefly the relations: equals, greater than, and less than. Suppose I say that John Smith equals in height John Brown. He may also be

shorter than X and taller than Y. Therefore John Brown is at the same time equal to, shorter than, and taller than. Columbus is north of Circleville and south of Delaware. Columbus is also east of Dayton and west of Zanesville. Columbus is therefore both north, south, east and west. We do not apprehend the relation of direction through sense perception alone. We do not perceive north and south. We cannot say where north begins and south ends. It is only by the mind that these relations are apprehended.

In knowledge we further classify data. There is no knowledge without the systematic ordering of things we have knowledge about. We order things in groups, series, classes. I refer to Teddy (my dog). There are dogs and men with this name. What do I mean by dog, man, bear. By man I mean a specific type of being who belongs to a certain class distinct from dogs, and that this class is distinguished by certain characteristics. The empiricist claims that we *perceive* or "sense" those characteristics. Suppose that we had seen a bear that walked like a man; would it be necessary to interpret and to classify that bear as a man? There must be a body of typical ways of behavior present before we classify the object as a man. As every triangle is a particular case of triangularity, so every man is a particular case of humanity. He shares in the attributes of humanity which make him such. No single man, however, embodies absolutely the attributes of humanity. Each individual is only a partial embodiment of these

attributes, and as this is the case we do not perceive the attributes of humanity by the senses. We perceive through the senses only the particular individuals, and no individual incorporates all the attributes of a class; no individual is the universal man. No man is humanity; no dog is caninity; no horse is equinity. One perceives this man, this dog, this horse, and that exhausts the range of perception.

Justice, injustice, temperance, and intemperance, — what about these moral attributes? We never say of any particular act that it is *the* complete embodiment of self-control. We never think that any act embodies all of justice. Each act is *an* embodiment of some universal quality or qualities. Every one of our experiences implies that there is a universal, and the universal is thought, not perceived; apprehended by the reason, and not through the senses. Mathematical relations, logical relations, class terms or class concepts such as humanity, caninity; ideas of value, (good, evil, beautiful), these are universals known only through the intellect, and only through these is knowledge possible. Without reasoning there would be only a disconnected riot — no sequence — of perceptions. That is what our experience would be without thought. But the fact that our experience is not such a riot — the fact that we order and classify and serialize all the facts of nature and the moral life implies that the soul is born with the capacity to think universals.

The main types of these universals are: —

1. Relationships.
2. Values.
3. Class concepts.

What we grasp with our senses alone is without thought: Sense material is mutable, it ever fluctuates. Long since Heraclitus said that the world is in constant flux. These universals, however, are not in the flux; they are changeless and eternal. The propositions of geometry are eternally true; they do not depend upon someone seeing or smelling them. And we indicate this fact by saying that truth is discovered and not made or invented. The same consideration is true in regard to all relationships. Relationships never fluctuate. Equality remains equality, no matter what the empirical conditions of any particular object may be. The relationship "greater than" is always "greater than". *Particular things* become equal to, greater than, less than other particular things; but *universals* remain eternally the same. The fact that we judge acts as just and unjust means that there is a universal, unchanging justice. There is a universal of temperance or self-control. There is also a universal of beauty. Men may come and men may go, but "humanity" remains forever the same. The type remains constant, and it is only on the basis of this permanence of type that all our forms of classification are possible.

Suppose that some explorer discovered a new type of animal life in some distant country and that the scientists were not sure whether this newly discovered creature is an anthropoid ape or a man.

How would this new specimen be classified? The scientist seeks to know whether it has tools, whether it speaks, whether it has society, art, etc., i. e., the scientist applies the universal idea of humanity and only on this basis can the new instance be manipulated.

The means by which we acquire or develop knowledge is through the possession by the soul of this capacity for grasping universals. True knowledge comes only from the activity of the soul in the acts of ordering and classifying the particular data in terms of the universals.

2. THE PLATONIC THEORY OF REALITY (*Metaphysics*)

These universals through which we know, Plato calls *ideas*, — *eidos*, — *idea*, — *form*, — *kind*, *type*, — *universal*. These words all mean the same in Plato.

In the Platonic theory there are two realms. The one is the realm of the forms, which is the realm of the eternal. The other is the realm of sense perception. This is the region of the mutable.

It is important to guard from the beginning against a confusion which prevails even in the camps of philosophers themselves as to the use of the Platonic term *idea*. The ordinary man takes ideas to be something in someone's mind. This is the psychological sense of the term *idea*, and this use we have inherited from Locke, Berkeley and other British empiricists. These men declare that we know only what is in the mind, therefore we cannot know an objective physical world. Plato is

not a subjective idealist. To damn a dog we need only call him a bad name — this has been done in the case of Plato, but the Platonic idea is never intended to be something *in our mind*. The Platonic idea is a form, a pattern, a universal type, and exists whether any human mind apprehends it or not. These ideas exist eternally in the realm of ideas. Thus we see that Plato does not mean what we usually mean by ideas — they are patterns, forms, of which the things of sense are merely bad copies or imitations. Or again, a Platonic idea is an eternally existing type seeking embodiment in particular contents, and because of the obstructing character of the material, no single particular is an adequate embodiment of the idea.

This brings us to Plato's conception of matter. He called it non-being ($\tauὸ μὴ ὄν$). Matter in Plato is the primitive, formless stuff out of which individual specimens or beings are formed through the influence of ideas or universal types. He does not mean, however, that matter does not exist; he means to suggest that it is not a *specific* type of being. He means to imply that there is indefinite potentiality. Matter is nothing in itself, but it is that out of which all particular things are made.

What then is the Platonic conception of the mode of operation of universals on matter. At this point Plato has a variety of answers. Things of sense and also our particular acts get their specific characteristics by participation in or imitation of the ideas. Every just act shares in the idea of justice; every man shares in the idea of

humanity. The realm of matter exists as the possibility of both particular beings and particular acts. There are therefore three logically distinct realms in the Platonic doctrine: —

1. Realm of ideas, the perfect realities.
2. Realm of particular things and acts, which actually exist.
3. Realm of pure matter or non-being. This is an abstraction and does not exist *as such*.

The ideas are dynamic; they are causes. They effect the work of molding matter into the form of particular things that exist in the world of our experience. Our world is therefore the product of the causal action of ideas on matter. If the ideas are eternal and thus have causal efficacy, why do they not produce perfect particulars? Why does not the kingdom of God immediately emerge? Why does not perfection in our ethical experience manifest itself? Here in our world there are no perfect dogs, no perfect justice, no perfect wisdom. Why not? The source of all particular things is perfect. The reason why no particular instance is perfect is that matter offers obstruction. It is recalcitrant to the operation of the ideas. Matter is mulish. There is a brute, irrational necessity in matter that obstructs the realization of ideas in matter. The Platonic view, therefore, is a *teleological idealism* involving a *dualistic* element. It is teleological in that it interprets the world in terms of purpose or final cause. It is dualistic in its conception of the two kinds of existence, matter and ideas.

Aristotle holds that Plato severed the realm of ideas from the world of sense. Whether or not Aristotle's criticism be just, at any rate we are justified in saying that there is a dualistic tinge in Platonism. There are two clearly distinct realms of being: —

- a) Realm of ideas,
- b) Realm of perceptual existence.

The realm of ideas is *above*, but it enters into and shapes the realm of matter into perceptual existence. The realm of ideas is thus both *transcendent* and *immanent*. The ideas of Plato are transcendent in that they go beyond actual experience, and are immanent in that they are indwelling and operative in experience. Plato's theory of reality is also pluralistic to this extent, viz., that there is an indefinitely large number of universals, each of which really exists. The essence of pluralism is that there are many existents — many beings that exist. But Platonic philosophy is not a chaotic pluralism. The ideas constitute a system, the keystone of which system is the supreme, unitary idea — The Good, the many in one or the one in many.

There is a doubt if Plato meant that the three logically distinct spheres — matter, perceptual existence and the ideas — should be regarded as three worlds. The probability is that he regarded them simply as logically distinct *levels* of existence. It is not easy, however, to say what Plato's view was. He examines the difficulties in the way of his own theories and repeatedly revises them. His mind

did not crystallize into an unyielding structure. In this respect Plato is the paragon of scholars. The constant prayer of the scholar should be this: "God deliver me from having a crystallized mind, from having a shut up mind." There is nothing so impenetrable as such a mind. It is more impenetrable than steel. There are minds into which no novel idea can penetrate.

The lowest level of existence is that of brute matter — mere matter which, in itself, is non-being. The precise meaning of this concept in Plato's system is not clear. Some authorities say that by mere matter he meant space. At any rate it is the formless stuff about which nothing more could be said, because it is formless. The second level is the realm of sense experience, and in this realm we can distinguish a number of stages. As an illustration, one may take a tree. The tree embodies more universals than its seed. Imagine this tree sawed into planks. The planks mean more than the log. These planks may be further utilized and elaborate pieces of furniture made out of them. The furniture embodies more universals than the planks. An amoeba is not a very highly organized being, but man is highly organized, and thus he expresses more and higher universals. The scholar is much higher than the ditch digger because he also embodies a greater diversity of universals. You may take two volumes, both made out of wood-pulp. Suppose that one of these is the latest, best seller, and the other a volume of Plato or Bergson. The difference between these two is tremendous. The Plato or

Bergson is vastly richer in *meanings*, i. e., universals, than the best seller. The third level is the realm of ideas or universals. Whether this is for Plato an entirely separate realm that communicates itself to the lower stages is not clear. At any rate, this much is clear, that it is the rational control of the lower levels. All meanings are from this realm. However small and ephemeral; however great and permanent; all order and value is derived from the realm of universals.

The particular thing participates in many ideas or universals. Plato does not mean, e. g., that man participates in nothing but humanity, or that dog participates only in caninity. A particular is a meeting-point for many universals. If this were not the case one could never predicate any attribute of any subject. The only possibility would be to say, man is man and dog is dog, et cetera. But we say,

Socrates is: { good,
wise,
older than,
shorter than,
etc.

Good, however, is not tall, or young, or old. Good is good. But unless the particular does participate in a multiplicity of universals, it would be contradictory to make any judgments. Only on this basis is predication possible. The empirical world, therefore, is seen to be a system, not a chaos. For the universals constitute the network that binds particulars together. Anything may have anything in common with something else. A bottle of wine

on the table and the symbol, square root of two, on the blackboard, have the common character of being in the same spatial whole. It is a fact, therefore, that every individual is a meeting-point of ideas, and thus is the sense world constituted a system.

Particulars of sense perception never adequately embody universals, and it is for this reason that sense particulars are always imperfect. Inasmuch as particulars are a system through sharing in the universals, the universals themselves constitute a system. All the ideas, forms (of which the particulars are the imperfect embodiments), constitute a system. The forms are all interrelated, and, though we may not see how *all* the universals are related, we can see how *some* are, e. g., ideas of justice and wisdom. We see that we cannot be truly brave without being just. We can see how moral qualities are interrelated. We can also see how certain metaphysical universals, as one and many, sameness and difference, are related. Sameness has no meaning apart from the idea of difference, and vice versa. If the world were a blank identity—as Hegel said, a dark night in which all cows are black—then our judgments involving predications of differences in all their forms would be impossible. It is the fundamental contention of Plato that universals are interrelated.

The work of knowledge is to discover what are the universals, and how they are related.

The *idea of the good* is the keystone of the Platonic system. This is the supreme idea. There is an absolute beauty, truth, justice, courage. But

the principle which unifies them all is the conception of the good. Our imperfect and growing ideas of truth are only imperfect approximations to the realm of these eternal ideas. We make this approximation through right thinking and conduct. It is by these two devices that we get a more systematic grouping of this ideal realm. This realm is a realm of eternal, perfect bliss, and its controlling idea is that of the good. Plato perhaps means by this doctrine of the good — God. ~~All the order and intelligibility, all the meaningfulness, in our world is an expression of the divine and absolute reality. In so far as we understand and feel and act wisely, just so far we grow in character and intellect into the likeness of the absolute and divine reality.~~

✓ The Final Cause of the world is the Idea of the Good. The world exists in order that the good may be expressed in a multitude of beings. Plato says that God, being animated by love and having no jealousy, desires that there should be as many beings like him as possible.

As to the details of creation, it is impossible to give any exact scientific account. The doctrine of the ideas, however, Plato holds is scientific. It is not a myth, although he invents many myths, and many of these have entered deeply into the texture of Christian theology. Before creation there was this primeval potentiality of things (matter), and out of this God fashions the world. In doing this God first creates the demiurge. This is the divine, creative principle in making the world. Its functions are like those of the Logos in the New

Testament. This demiurge is the energy of God at work. The demiurge then fashioned a world soul, and then fashioned souls for each planet and star, after which he fashioned souls for human beings. Thus we have: —

1. World soul,
2. Planetary souls,
3. Human souls.

All this process is effected that there may be as many souls as possible in the likeness of the divine.

3. PLATO'S DOCTRINE OF THE SOUL (*Psychology*)

The soul means for Plato the principle of life and consciousness. We are here interested in his doctrine of the nature of the human soul. The human soul is tri-partite:

1. Highest part (noetic part), "νοῦς"; its seat is in the head;
2. Next lowest part (executive part) "θυμός"; its seat is in the thorax;
3. The lowest part (appetitive part) "ἐπιθυμία"; its seat is in the abdomen.

In the human being, however, these parts form an interacting whole.

Plato compares the human soul to a chariot drawn by two steeds and driven by a charioteer. The two steeds are the spirited part and the animal desire part. Desire wishes to turn aside and delay at the pleasant places of life while the spirited part is impetuous to rush on, and so it is the province of reason to regulate the conduct of these two.

"Νοῦς" is divine. The reason of man is the highest source of knowledge. It is through the reason that we apprehend universals. And it is this part of the soul that did not originate with the body. It is this rational part of the soul which shares *directly* in the nature of the ideas. The other parts thus share only so far as they are penetrated by reason. The origin and destiny of the "νοῦς" is independent of the body. True, it is now immersed in the body, but it is independent of the body. In the Phædo this is Plato's main argument for immortality.

4. PLATO'S THEORY OF HUMAN GOOD

(Ethics and Social Philosophy)

Plato does not separate ethics from social philosophy. His position as to the true nature of man is the same as that of Aristotle. Man realizes his nature only through a well-ordered society. The function of the state as the highest form of social organization is the realization of virtue on the part of its citizens. The state exists as an instrument of culture. The chief means whereby the state fulfills its function as such an instrument is education. The ends of education are the development of the *virtues* of the self. Plato is here everlastingly right. This is the only sound theory of the state's function. Plato insists that the state is to afford the means for the fullest development of its citizens, and that education is the chief means. This calls for a clear and consistent doctrine of con-

duct and character. Plato bases his whole social doctrine on his psychological analysis. The good is the harmonious functioning of the three parts of the soul: —

1. The virtue of desire is self-control;
2. The virtue of the spirited part is courage;
3. The virtue of the rational part is philosophic insight;
4. The virtue of the whole system is justice and righteousness.

When one satisfies appetites under the consciousness of consequences, he exercises self-control. When one lets loose his vigor only under proper circumstances, then one exhibits courage. Courage is not the running amuck of rashness. Courage for Plato is the fixed resolve to go ahead and do the right with a clear consciousness of the dangers involved. Wisdom is philosophy, and philosophy is insight into the relations of life. It is love of the truest and the best. The exercise of wisdom is impossible to one who has a keen intellect but no enthusiasm, no love for knowledge. In wisdom there must be this enthusiasm as well as keenness of intellect.

As to the function of the state, Plato holds that it is to provide adequate means for the development of virtues. It is the cultivation of the individual as a member of society that the state is to effect; and the great truth in Plato is that he bases his social and educational theory on the psychological

analysis of the individual. *The state is the individual writ large.*

As to the organization of the state in regard to its end and the mode of reaching it, Plato's idea is that the moral culture of its citizens is what is to be furthered by this organization. And this end will be best furthered if the state be ruled by an aristocracy of character and intellect. Etymologically the term "aristocracy" means the rule of the best and not the rule of those who have inherited wealth or special privilege. *We* mean by aristocracy, a class having special privileges. But this is not Plato's meaning. He invariably means those best trained for the service of the state. It is to make one fitted to play his part in the state that is the real task of life. When one is so fitted, he will have personal well-being. This, however, is not a picture of an actual state; it is the ideal of what a state might be, ought to be.

There are three classes in this ideal state, and they correspond respectively to the three divisions in the soul of the individual. A large number of individuals, Plato thinks, are born without capacity for achieving any high degree of intellectual insight — most people are not born to be philosophers. A good many also are not born to be defenders — guardians — of the state because they lack that moral courage which is necessary to a guardian. They are to supply the material conditions of life; they are to be agriculturists, artisans, business men, bankers. We think today that the business man exercises a much greater amount of insight

than Plato ever ascribed to men following this type of service. The virtue which stands out in this class is *self-control*. To be good traders, farmers, artisans, bankers, they must exercise self-control. In this class Plato will allow private property as a stimulus to their more effectually providing the physical conditions for all the social classes. The two upper classes, however, are to be supported at the expense of the state, but are not to be allowed private property. For Plato is of the opinion that the quest for riches would distort their sense of service, would interfere with their disinterestedness of spirit.

The men of strong will, of courage, are to be the guardians, the commanders of the state, — here as well as in the lowest class, Plato, of course, assumes that a modicum of wisdom is required.

The third class consists of philosophers for whom the consuming passion in life is knowledge and virtue. Only the wisest and best should rule. The fundamental virtues of the lower classes are theirs as well as wisdom. Self-control and courage, crowned by the knowledge of the nature and vocation of human life, this is the life of the philosopher. Those born with the highest endowments are to be trained until about fifty years of age. There are to be no young rulers in the Platonic republic.

Education is the one instrument for realizing this ideal, and in the Republic he outlines his theory of education. The basis of education in early youth is bodily exercises. A sound physical foundation must be laid. There must also be moral instruction

and this is to come through narration of myths and of stories, with a view to stimulation of the imagination in the direction of right conduct. There is to be a cultivation of the feelings and an inculcation of right ideals. Before teaching the youths the stories of the past, Plato would take the poets and their stories of early heroes, and, indeed, also the historians, and he would go through them with a blue pencil; he would strike out all unseemly stories of the gods, he would present no intellectual food to the plastic imagination of the child that is degrading or suggestive of evil. Thirdly, music is to be taught. By means of music the individual's feelings are stirred, refined and harmonized; and for all the Greeks the sense of harmony — of proportion — is indispensable to the good life. Plato rests the education of the child on a threefold foundation, viz., physical, moral, and aesthetic.

At the age of about twenty, a selection can be made of those fitted to go on further, and to those so selected, a thorough training is to be given in mathematics. Mathematics is *the* type of science for Plato. Then would come the study of the interrelations of the subjects already studied — the beginning of dialectic or philosophy. At the age of thirty, a still further selection of those excelling in mathematics is made. Those who show a capacity for leadership are now to take up the study of dialectic, this to continue for about five years, after which they are ready to serve the state in minor offices and military commands. Thus at the age of about fifty, having already served the state for ap-

proximately fifteen years, those who have acquitted themselves best are qualified to rule and to continue to do so until they retire, whereupon they are supported at the expense of the state, for they have "done their bit".

The idea of the science of eugenics is developed in Plato. We are beginning today to think that a child has a right to decent parentage: criminals, idiots, and confirmed drunkards ought not to be allowed to propagate their kind. Plato thought so.

Plato was the first to advocate eugenics. He would place marriage under the control of the state. The state exists for the production of the highest type of virtue in the citizen, and for this the individual must be born with good capacities.

While we are so diligently and aggressively making the world safe for Democracy, let us ask what Democracy is and what are its limitations? Let us be clear as to what Democracy is to mean and as to what are its possibilities and problems. Plato is everlastingly right in saying that no amount of demagogic oratory will alter the fact that individuals are not born with equal capacities. No romancing about Democracy will alter the fact that a state not run on the basis of merit will never realize the highest good. Any state policy which prevents the best from serving their state has something wrong in it. Even our own democracy has many defects, among which is a general lack of recognition of need of the highest training and best character for service of the state and society in public office.

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CHAPTER VI

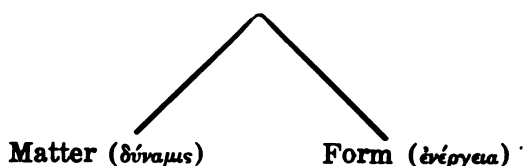
ARISTOTLE — 384-322 B. C.

Plato had a large school called the Academy. Of that school Aristotle was the ablest member, and he in turn later established the Lyceum, an institution which became the most important center of learning in the ancient world after Plato's demise. Aristotle was a tutor of Alexander the Great, and it is often supposed that Aristotle got money for his school from Alexander. Aristotle made great collections in the departments of botany, zoology and other fields of science. While Plato was a man of poetic inspiration and great speculative insight, Aristotle was a great intellectual organizer. He systematized and developed the doctrines of Plato. His logic has remained the basis of logic to the present time and his ethics is still full of sound instruction. He wrote on politics, anatomy, botany and poetics. He also wrote treatises on metaphysics, or the first principles of reality, and psychology, which are still very important.

1. ARISTOTLE'S THEORY OF REALITY (Metaphysics)

Aristotle accepts the Platonic conception of knowledge, i. e., knowledge comes only through universals, concepts, forms. Yet Aristotle thinks that Plato erred in separating the universals from the particulars. The following scheme illustrates Aristotle's conception of reality.

The individual being (enteλέχεια)



By matter Aristotle means the potentiality of forms. There is one pure form, namely, God. There is no matter in God. *Εντελέχεια* is that which is the fulfillment of an end. Thus we see that Aristotle has a teleological conception of nature.

Δύναμις or matter is the *possibility* of being an individual, while the form is the shaping, the organizing, the dynamic principle. For Plato the ultimately real world is the realm of eternal forms. Aristotle, however, maintains that reality is a development of individuals through the immanent, indwelling force of the forms. The universals do not exist apart from the particulars; they exist only in the individuals. The formative principles, therefore, are immanent, not transcendent. We may illustrate this doctrine as follows: We say the child is father to the man. We mean by this that the possibility of the statesman, poet, or artisan, is in the child, and the realization of that possibility is the coming into being of the individual man. The oak tree is the realization of the matter or potentiality latent in the acorn. Thus throughout nature there are operative, purposive entities, and the realization of the end is always due to the activity of the form *in* the matter.

Aristotle criticizes Plato on the ground that he separated ideas from the sense world. Aristotle himself seeks to make ideas the immanent, indwelling or shaping principles in the world of sense experience, and he develops this view as follows: matter, he maintains, is the potentiality or the possibility of form. Matter does exist, but not by itself. There is no such thing in reality as formless matter, a primeval stuff which is pure chaos. The notion of pure matter is for Aristotle a limiting concept. Matter which is to some degree shaped by forms is what actually exists. Thus his conception of matter represents an advance over the view of Plato. The forms or universals of Aristotle are called *entelechies*. They are the realization of the possibilities of matter to be formed. Reality — what is real — is the individual. There is no such thing as either pure matter or pure form except in the case of God, who is pure form — Form of Forms.

The world is a system of development in which there are an indefinite number of stages or levels. On the lowest level we have an individual that has the fewest forms embodied in itself, e. g., clay. This lump of clay may be taken by the sculptor and shaped into the figure of an Apollo Belvedere, or a Venus de Milo. Then the lump of clay, under the guiding mind of the sculptor, becomes the embodiment of the Greek ideas of manly and feminine beauty. Into the making of any individual, according to Aristotle, there enter two causes, the material cause and the final cause. The material cause of

the statue is the clay or the marble, the stuff out of which the individual is shaped. The final cause is the purpose or idea. There are three phases or aspects of the final cause: —

1. The end — *τέλος*.
2. The formal cause, i. e., the shape the individual takes in the mind of the sculptor.
3. The efficient cause, the instrument by which the end is realized.

The idea of artistic creation was very influential with Plato and Aristotle. They were both Greeks, and these above all other peoples were endowed with a high order of artistic powers and appreciation.

Aristotle's interpretation of nature is both humanistic and artistic. His Philosophy of Nature is what may be called an artistic teleology, i. e., he gives us an interpretation of the processes of nature in terms of artistic purpose. God is a cosmic artist. Among all the natural sciences, biology is the one which interested Aristotle most. His conception of the relation of life and matter is teleological and artistic. This comes out clearly in Aristotle's conception of the soul and its relation to the body.

2. ARISTOTLE'S PSYCHOLOGY

The soul is the entelechy, the principle of life which shapes the body to its ends. Only potential life belongs to bodies. Actual life is due to the influence of the soul — body is the instrument of the

soul. The actuality of the body is derived from the soul. Aristotle distinguished between three levels in the soul: —

1. *Nutritive soul*: This is the principle of life and reproduction, and is common to all plants and animals.
2. *Sensitive soul*: This is common to all animals. It is the soul which has sensation and feeling. Aristotle thinks that plants do not have sensation. Among the senses, he makes touch fundamental and the source of all the others.
3. *Rational soul*: Through this soul knowledge and reflection come.

In man these three interact. Reason gets all of its material through the senses and the imagination. At this point Aristotle gives us a *psychology* of knowledge, which we did not get in Plato. While the materials come from sensation, the separate senses have not the power of discriminating and reasoning.

Aristotle is the first to definitely formulate a theory of the nature, structure, and function of the judgment. So far as the rational soul is influenced by the lower grades, it is relatively passive. But reason itself is active, creative, synthetic, and its activity enters into all true knowledge, and true knowledge consists in knowledge of the universal concepts. In the act of knowing, the mind is one with what it perceives.

Reason is pure activity, whose work is guided by the laws of thought. Aristotle holds that, while our knowledge of the world is derived from the senses, yet there is no *knowledge* except in so far as the materials of sense are judged by reason.

3. ARISTOTLE'S THEORY OF KNOWLEDGE

In the moment of knowing, mind is one with the object known. The knowing process is one with what it knows. Aristotle's position, therefore, is what is known as epistemological monism. This view of knowledge is to be contrasted with all theories of dualism. Dualistic theories maintain that in knowledge we deal with symbols or copies, and not with the object directly. In Aristotle we have the realistic position — mind knows the objects as they really are — which is opposed to phenomenalism. In phenomenalism the mind is said to know appearance, symbols, copies of things, and not things as they are. In Aristotle we have this, one of the most persistent of philosophical problems explicitly formulated. In this realistic position mind and object known are held to be one in the moment of knowing.

All forms of phenomenalism agree in saying that mind knows only appearances. There are, to be sure, several types of phenomenalist theories. These types range from those which insist that the knowledge copies are fairly good copies to those views which urge that through our copies we get to know nothing whatever about the object. Realism denies that knowledge is concerned with copies. It rests directly upon the assumption that, e. g., in the

moment of my perceiving this desk, there is no real distinction between my perceiving and what I perceive.

Aristotle uniformly held that sense perception is a genuine source of knowledge, and that the reason is dependent on perception for its knowledge of objects in nature. There is a gradual transition from sense perception to rational thought. In the lowest stage there is direct perception of objects; after this there comes the process of forming images, and then the forming of conceptions; but in all this reason is active. To illustrate this point, suppose that you visit some strange region never before visited by man, and in that strange region you see strange animals. You begin to gain control of the situation by classifying the animals in question and you form images and class concepts into which the objects fall, and then you make a definition of the class then discovered. It is in the formation of the definition that the mind is most active, and it is upon the basis of such definitions that the reason can further work deductively. This threefold process eventuates in scientific knowledge only through the unifying power of the reason. It is through this power that all our concepts are synthesized into a well articulated system, and this takes place under the guidance of the first principles of thought. These first principles, we intuitively perceive, and, while they do not have their origin in experience, they do have application in experience, i. e., these first principles are not *of* experience, but do have application *in* experience.

Aristotle's theory of knowledge is more carefully elaborated and systematized than Plato's. He also pays more attention to the psychological process by which knowledge is constructed. It is often said that Aristotle is an empiricist. This is not true, although it is true that he gave far more consideration to empirical data than did Plato. Aristotle holds positively to the existence of intuitively known principles. For him all knowledge is not derived from sense perception. The individual mind is not purely passive. He differs greatly from the English empiricists who maintain that the individual is a passive organism on which the world writes or perchance scribbles. Rationalism holds that the fundamental principles of knowledge are not derived from sense experience.

X Rationalism need not deny that the senses do give the materials of knowledge. A rationalist of the Aristotelian variety does not excogitate the data of perception out of his own inner consciousness; but the reason is creative, and it is the source of the fundamental principles of thought. There is an oft forgotten and withal important distinction which Aristotle makes when he points out the difference between priority in the psychological order and that in the logical order. Psychologically sensation is prior to conception, i. e., the child has sensations before it has concepts; it has particular experiences before it has general experiences. Our scientific knowledge began with crude data and proceeds only gradually to the refined results given us in scientific formulæ. By logical priority Aristotle means that

there is implied, or actually used, universal principles in the organization of our sense experience. The organization of sense experience into science uses these fundamental principles even though it may never know what these principles are.

4. SUMMARY OF ARISTOTLE'S THEORY OF REALITY .

Aristotle's conception of reality is that of an endless process of passing from potentiality to actuality, or, from the formless to the formed. Forms are the dynamic principles that operate in the natural order. All individual beings from the simplest crystal to the very highest individual are the results of the operation of the entelechies or formative principles in nature. Reality is the constant process of the actualization of forms.

Nothing in the natural world is created all at once. Everything develops, grows. Broadly speaking, therefore, Aristotle's philosophy is that reality is an evolution. It is an evolution towards progressively higher types of individuality. It is a teleological evolution including in its purposiveness a realization of a multitude of purposes or ends. Such a conception of nature implies that the all-inclusive purpose is operative through all the stages of the process. In other words, such a theory implies that, while the purpose of the whole is realized in time, this purpose must be eternally existent. There must be a form of forms, a pure and all-inclusive form, free from any admixture of matter; and this form of forms must be presupposed in order to account for the process, and indeed, for any

stage of the process. This form of forms, this eternal purpose, this universal mover, is God. He is the source of all movement, of all actuality.

Matter has a contingent, irrational character. It is not wholly subservient to the realization of form and purposive reality, and it is this character that matter has which is the cause of all failure in nature. God is the final cause, and as the final cause, he is the eternally first cause of all movement. He is eternal, being without parts or passion, and unmoved by the phantasmagoria of the world of sense. He is pure thought, pure activity, —pure thought unhampered by any admixture of sense. He is the eternally tireless, active thought of the universe. As to why there is one and not a plurality of gods, Aristotle replies that God is one because the world is one. The beauty of the world, the intelligent and harmonious connections of its parts are evidence of a supreme purpose operative everywhere in nature. The splendor of the stars point to one being from whom comes all unity, harmony, and splendor of the world. This one God is transcendent, self-conscious spirit, the eternally first cause of all change and development.

Aristotle believes in divine providence, but that God works through natural means. At the time of Aristotle there were two ideas in Greek religion which he readily accepted:

1. Recognition of the existence of gods;
2. The divinity of the stars.

As to how God acts upon the world, Aristotle holds that there is a longing of matter after God. In

matter is the desire to become pure activity. It is this longing of the world to become like God that is the immediate cause of all the world process.

5. ARISTOTLE'S DOCTRINE OF THE GOOD (*Ethics*)

The good of anything, on the basis of the Aristotelian conception of the Good, consists in the actualization of all the functions that belong to that being. Every type of being has its own modes of activity, and it is the realization of these that constitutes the Good. That which distinguishes man is his reason, and, therefore, the Good of man is the activity of reason unfolding itself in all the virtues. When man exercises his functions as a human being, he is happy, but the desired end of such functioning is not pleasure. Pleasure is the result but not the motive. Welfare is the energizing of the soul according to virtue. Nowhere in the whole range of ethical literature is there a better definition of the Good for man. Aristotle does not have the ascetic strain of Plato, at least not to anything like the same degree. The body is not a prison house for Aristotle.

Aristotle gives a twofold classification of the virtues, viz., practical and theoretical. By practical, Aristotle means the fundamental social virtues; and, like Plato, he holds that human life can be realized only in society: ethics and politics for Aristotle are inseparable. This is a fundamental truth — politics is nothing but applied ethics. These practical virtues are courage, self-control, liberality, high-mindedness, friendliness, truthful-

ness, justice, et cetera, and each of these, it is evident, is a functional mean between two extremes. The theoretical virtues have to do with the exercise of thought. Judgment here assumes two forms:

1. Judgment as to means;
2. Judgment as to ends.

The highest virtue of all is wisdom. Applied to life as a whole, it is self-knowledge and understanding of things in relation to God. It is pure contemplation. This is the sweetest and best of all things. This contemplation of all things as dependent on God — thinking the thoughts of God after him — of this one never grows tired. When freed from the vicissitudes of chance, this is the highest delight of man.

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CHAPTER VII

ATOMISTIC MATERIALISM

Materialism is one of the main types of world view or metaphysics. The essence of materialism lies in the following four doctrines: —

- a) All qualitative varieties and changes in the world of human experiences are reducible to quantitative terms and statement.
- b) All perceptions, feelings, thoughts, — the whole content and activity of mind, are reducible to the motions of mass particles in space.
- c) Because of this, all so-called secondary qualities of objects are merely phenomena in the human organism — these secondary qualities do not exist in the objects themselves. It is only the primary qualities which really exist apart from the *human percipient* organism.
- d) Every event which occurs, every happening in the endless process of things, is the result alone of blind mechanical motion. There is no purpose, no meaning, either in the sum of things or in the elements of things. What the man in the street calls purpose or providence are illusions of his own provincial, self-centered point of view.

unfolding

What really goes on and really determines with inexorable necessity the sequence of events, is the eternal, unmeaning, unconscious dance, the collision and rebound, of mass particles in space. No one guides the process to an end, and no one controls it. Our desires, our intents, our purposes, have no more significance in the blind and insensate organization of the universe than has the dancing of a mote in the sun-beam.

Leucippus (dates unknown, reputed teacher of Democritus) is the originator of atomic materialism. It was Democritus (about 460-370 B. C.) who brought the theory to the completeness given it by the Greeks. The Epicurean School, one of the most important Schools after Aristotle, adopted or affixed atomic materialism to its theory of conduct. One of the chief causes of superstition has been the fear of the gods, but on the basis of this atomic theory, there is no place for the gods; and it was for this reason largely that atomism was taken up by the Epicureans. The great Latin poet, Lucretius, in his philosophical poem, "On the Nature of Things", also expounds the philosophical system of atomism.

The influence of atomism then died out, and was revived again when adopted by Gassendi and Hobbes. And in modern experimental physical science, it has played an important part. The electron theory is only the latest development of this atomic theory. The modern scientific atomist is not concerned about the substrata of the mind or

the problems of value. In physical science the atomic theory is simply a working hypothesis that best seems to fit all the facts. It is the best scientific policy there is. To assume that matter is discrete and not continuous enables the physicist and chemist to get forward in their investigations. In Democritus and Leucippus, atomism is a metaphysical doctrine. It is put forth as being adequate to explain the whole of reality. Leucippus, who was younger than Parmenides and older than Democritus, was a contemporary of Empedocles and Anaxagoras. Democritus was a contemporary of Socrates and in part, of Plato. There is a tradition that he lived to be nearly one hundred years old, living from 460, B. C., to 360, B. C. He was a native of Abdera, the home of Protagoras. We have only a very fragmentary account of Leucippus. Of Democritus we know that he had the greatest acquaintance with natural science next to Aristotle. Unfortunately he remained in the provincial town of Abdera. He did not move to Athens, and it was perhaps because of this that Democritus' teaching had little influence in Athens. There never was a vigorous School owning Democritus as its founder.

Parmenides of Elea had taught that the one substance is unchanging, eternal, and homogeneous. Heraclitus, on the other hand, taught that all is change. The law of change alone is permanent. Leucippus combines the ideas of permanence and change in such a way as to admit both without making either illusory.

The way out of the opposition between per-

manence and change is as follows: Reality consists of an infinite number of particles. These exist eternally. They are ungenerated. They exist and move in empty space. *Atoms* and the *void* are the original and indestructible data of reality. These atoms differ in size, and they differ to an infinite degree in their forms and shapes. Some of them have hooks, others have eyes, grooves, protuberances, et cetera. While moving in space, these atoms impinge upon one another and rebound. They incessantly move, and the falling together of the atoms produces a vortex movement, and it is this movement that gives rise to a world. There is an endless procession of worlds — our world is only one of an endless number of worlds that arise and pass away. This world of ours swings in empty space like a ball. On the outermost bounds of the world is a rind, as it were, of closely packed atoms. From the impact and rebound of atoms arise all things. The four elements, of which fire is the most important, also arise in this manner. Inasmuch as the atoms have only those qualities which we approximately call primary — i. e., only spatial and mechanical properties — the question arises, how is it that we come to perceive all these other qualities in the bodies, and how do we know that these qualities exist only for the human organism? And also, how do we know that the other qualities exist in the objects? The reply to this question is given us in the atomistic theory of knowledge.

The soul consists of the motion — nothing but the motion — of fine, smooth, round, fiery atoms.

Objects throw off eidola, images, and these images enter the sense organs and then give rise to the secondary qualities. These images are not good copies of the objects because they are due to the meeting of the motions of sense organs with the systems of motion in the form of the images thrown off from the objects. They are distorted, and therefore the senses do not acquaint us with the nature of reality. The external world has no sounds, no tastes, no odors, no colors, no harmony or discord, no warmth or music. There is simply everlasting motion of mass particles in space. The soul itself consists of the finest motion of the finest particles. Thus thought is also regarded as being the resultant of mass particles. It is through thought, urge the atomists, that the wise man knows that the world consists only of atoms moving in a void. Most men know only what is given them through the senses, but the wise man through intuition learns the truth.

As to the nature of the Good, Democritus assumes that happiness is to be attained only through the exercise of thought. Materialist though he is, he is one of the most extreme rationalists. Genuine knowledge of the real is attained through the exercise of thought and not through the senses. In this type of intuitive knowledge, there is a harmony of the soul, a calm, a gentle, harmonious reaction of the soul atoms. In sense knowledge we have those passions, those hurricanes that lash the soul and make it impossible to desire true knowledge.

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CHAPTER VIII

THE DECLINE OF GREEK SPECULATION

There are two tests of the value of a philosophy :

- a) The adequacy of the philosophy as an interpretation of all the main aspects of human experience, i. e., the completeness, the balance of its interpretation of all the facts;
- b) Its fruitfulness as a technique in stimulating further inquiry.

Judged by (a), atomistic materialism is not a great philosophy. (This aspect of the problem is to be discussed later.) Judged by (b), atomistic materialism is a valuable philosophy. It has been most fruitful as a method of inquiry in modern science. Why did it not develop more fruitfully in the ancient world? Abdera was, as already stated, a provincial town. Indeed, it is not certain whether Plato knew anything at all about Democritus. After the Hellenic philosophical efflorescence in Plato and Aristotle, atomism did exercise considerable influence through its adoption by the Epicureans, but the interest of this School was not in scientific inquiry. The two centers of scientific inquiry were the Academy and the Lyceum. It is possible that atomistic philosophy was a factor in the scientific work that was carried on after the time of Aristotle

in Alexandria and other points. It is well known that in geography at this time the sphericity of the earth was taught. The heliocentric theory was also advanced, by Aristarchus and others, but through the influence of Aristotle and other causes, this theory died out. At this period Euclid's "Elements of Geometry" was systematized. Archimedes laid the foundation of mechanics, while in medicine certain important discoveries were made.

Experimental science, however, after flourishing for several centuries,* died out. It had its beginnings and its firm foundations. Although it did have a firm mathematical basis, it did not, until after the lapse of over fifteen hundred years, make any fruitful application of the method devised by Democritus. The spirit of independent inquiry gradually died out. The old Greek world of city states with their keen intellectual atmosphere was submerged in the all-devouring imperial Roman world. This world of Roman imperialism was the melting pot of the ancient world. It was a polyglot world, a world of all sorts of races and nationalities, a world of intellectual and religious confusion, and a world of political and economic confusion. It was largely through the functioning of this last form of confusion that the Empire's disintegration resulted. There was no spirit of individual inquiry to speak of, — the Romans were neither philosophically nor scientifically minded. They were empire builders and rulers, they were city builders, they were road builders, — in short, they were prac-

*Especially at Alexandria.

tically minded. They did not make even second rate contributions of the creative intelligence in philosophy or science. After the disintegration of the classical Greek world, the minds of men turned more and more to the questions of conduct and religion. In all ages of confusion, in periods of lack of unified culture, in epochs where there is an absence of stable political and social life, when the lives of local communities are merged in the vast welter of some extensive empire, when the old religion is losing its regulative power, — in short, when the old traditional life in all its diversified forms is passing away, there may be nothing positively constructive and able to replace it. At such junctures, the minds of men turn from philosophy and science to the practical questions of the hour. And so we have, at this special period under discussion, an eclipse of the spirit of philosophy and science. So, it seems to me, it may be in this present age. If this war continues long enough there may come an arrest of progress in civilization. There may appear a recrudescence of barbarism and superstition.

There is a superficial, optimistic faith as to progress. Some think that progress continues in a straight line. This is a childish faith. Magnificent Greek culture with all its bewitching splendor died out and was succeeded by centuries in which the independent thinker never dared raise his head and look with open eye at nature and see things as they are. There is a story told to illustrate this point. It is of an incident that occurred in a monastery

about the year 1600. A monastic student of astronomy discovered the spots on the sun, of which there was no mention in Aristotle. He was told by his master that if it was not mentioned in Aristotle then the spots were either in his eyes or his glasses.* This illustration shows the blind obedience to authority which prevailed through the Middle Ages.

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*This story is told of Scheiner, circa 1600, who contests with Galileo the honor of having discovered the sun-spots.

CHAPTER IX

SKEPTICISM

Skepticism literally means a thoughtful inquiry, the looking at a problem in a disinterested spirit, the surveying of a question from many sides. In this sense it is the very essence of philosophy and science. It has come to have, however, a new meaning, i. e., it doubts the possibility of knowledge. Skepticism may be either partial or complete. Most of the great Greek philosophers, Plato among them, not only doubted the validity of knowledge derived through the senses, but they denied that the senses alone give us true knowledge. These great thinkers held that we could know reality through reason. Thus they were rationalists, not skeptics. In fact there is scarcely a great philosopher who was a thorough skeptic, save David Hume, and even Hume held that utter skepticism could not be maintained in practical life.

Under the head of complete skepticism we have what is called *dogmatic* skepticism. This is often identified with agnosticism. (This term was coined by Huxley, and he did not mean dogmatic skepticism but an attitude of ignorance in regard to ultimate problems.) *Critical* skepticism involves suspense of judgment on all problems. This form of skepticism was first formulated by Pyrrho, 365-275 B. C., and was further developed by Carneades, 215-

130 B. C. Dogmatic skepticism is self-contradictory, for to say that it is impossible to know is to make a dogmatic statement which claims to be truth. It asserts so much as to the nature of mind and reality as to negate its own presuppositions. A skeptic of this kind is an arrant dogmatist. Pyrrhonic skepticism tries hard not to contradict itself. It is critical. Its standpoint is that we are not certain whether we know something or whether we can know nothing. Since we do not know whether we do know nothing or something, the only consistent attitude is that in which there is a suspension of all judgment. To be thoroughly consistent, the Pyrrhonic skeptic would have to hold that he was not certain whether we ought to suspend judgment. The skeptic, to be consistent in all respects, should add that he cannot know whether one ought to say that one ought to suspend judgment, and that one cannot know whether one cannot know whether one ought to say that one ought to suspend judgment and so on ad infinitum. Carneades argues that since certitude is impossible, (a dogmatic statement!) then probability is the guide of life, and he further holds that there are degrees of probability, viz.:

- a) The first degree is plausibility.
- b) A proposition may be not only plausible but also not contradicted by other sensations, and thus has added plausibility.
- c) A proposition thoroughly consistent with other propositions is still more probable.

At this point Carneades, in making consistency his basis or test of judgment, is inconsistent with his initial proposition.

Practically all the arguments of present skeptics were devised by the Greek skeptics. The first and chiefest argument is the argument against the trustworthiness of the senses. Skeptics for the most part presuppose a sensationalistic theory of knowledge, and then, noting the unreliability of the senses, they either doubt or deny the possibility of knowledge.

Zeno, a pre-Socratic rationalist and disciple of Parmenides, had for his primary aim the task of refuting the assumption that reality is many and changing. Zeno shows that belief in the senses lands us in contradictions. If knowledge is reached by perception, then if a corn-measure full of corn be taken and the corn be dropped on the floor, a noise will be heard. Then, if we take one grain and drop it, it ought to make a noise, but it does not. Thus, in this instance, the senses deceive us. The senses do declare that many things exist, but if the many things do exist, they must be made of indivisible units. These units can have no magnitude, but if the component units have no magnitude, then the sum has no magnitude. If there are any two objects, then between the two there must be a third, and between these again there must be still another, and so on indefinitely, therefore being must have infinite magnitude. In regard to the phenomenon of motion, Zeno shows that those who hold that there is motion appeal to the senses. And in the

discussion of this question the well known paradox of the flying arrow, and that of Achilles and the tortoise are given. An arrow in order to pass from one point to another must pass through an infinite number of points in a finite time; moreover, if at one instant it be at one point and at the next instant at another point, it must have passed from the one to the other point in no time. If Achilles runs ten miles per hour and the tortoise one mile per hour and if the tortoise be given one hour's start Achilles can never catch the tortoise. For while he covers the first mile the tortoise will cover one-tenth of a mile, and while Achilles covers the one-tenth mile the tortoise will cover one one-hundreth of a mile and so on forever. Since any finite distance is made up of an infinite number of positions no finite space can be traversed by a moving object in a finite time. Motion is impossible. Zeno's arguments are all aimed at proving the utter untrustworthiness of sense-perception. His conclusion is that through reason alone have we knowledge of the one and unchanging Being or Reality.

The arguments of the later skeptics are not of the same rationalistic character as those of Zeno and his School. The later arguments are of a more empirical nature.

The first and chief set of arguments for skepticism are empirical ones. They are drawn from considerations involved in the limitations and variations of sense perception. These arguments fall under four heads: —

- a) Differences are due to differences in the organization of animal forms. The various species have various degrees of sensitivity of sensation. Even human beings differ in their sensory reactions, some being duller in one sense and more active in some other sense. It is a notorious fact, says the skeptic, that there is no value in discussing tastes, — “de gustibus non disputandum”. “One man’s meat is another man’s poison.”
- b) The second body of items in support of skepticism is drawn from the variations of an object’s appearance to the different sense organs. An orange is round and yellow to the eye, it is rough to the touch, sweet to the taste, and to the merchant it means a certain amount of cash.
- c) The same individual’s organism varies from time to time. If one has a bad cold in one’s head, then the delicate flavor of food does not exist for him; and to one having either fever or chills, the temperature conditions are quite different from what they are to the same individual in a normal condition.
- d) There are all sorts of differences in men’s reactions to their surroundings which are due to moral custom, beliefs, traditions, et cetera. The effects of environment and early habits largely determine what we regard as right or wrong, true or false,

beautiful or ugly. Our so-called judgments about these types of relations are largely, if not entirely, determined by education, habit, and environment. A study of the different peoples at different levels of social development also indicates this. These four types of argument are all based on the relativity of the percipient organism.

There is still another group of differences which make valid knowledge impossible. Here fall cases of the relativity of the objects themselves. The object depends for its sensory qualities upon its relation to other objects. A distant object looks smaller than the same object nearby; an object in bright light has a different color from the same object in twilight. This holds true also of sounds. Qualities differ also according to quantities. A man, for instance, may take a little wine and feel good; he may take more and feel bumptious; he takes still more and he gets roaring drunk. Arsenic in its behavior also shows pronounced differences in reaction in proportion to the quantity taken. Qualities all seem to vary with quantities.

All judgments are relative. Thought cannot give us the truth. Even in the special sciences, it is seen that demonstrations proceed from underlying assumptions, and these assumptions, which are the final grounds of knowledge, are without proof.

The Stoic philosophers maintained that true propositions are those which are clear and self-

evident. But, says the skeptic, clearness and self-evidence is a matter of fallibility. The Stoics formulated a second criterion, namely, the "consensus gentium". This means the universal consent of mankind to a proposition. At this point again the skeptic replies, there is no such proposition. The Stoics had also argued that the order of nature, the cause of events, was evidence of the existence of a world-reason and an overruling providence. To this argument the skeptic replies by pointing to the manifold evils in nature and society. Everywhere it is a case of "homo homini lupus". Misfortunes assail the good, while the bad goes free. This was, indeed, the poser which was too much for the Psalmist. He saw the wicked flourishing like the green bay-tree and the righteous suffering. How can this be? The God who rules the course of events cannot be infinite nor can he be an individual, for if he is an individual, he is limited by others. He cannot be either body or spirit. If he is pure spirit, then he cannot act or feel; and if he is corporeal then he is either a simple or a compound body; if he is simple then he is finite and if he is a compound body, he is made up of simples and is liable to disintegration and death.

The conclusion of the whole matter is this: The wise man will not be sure that he can be sure of anything. He will guide his life wholly by probability. Like Cratylus and others, he will not pass judgments; he will not even wag his thumb.

I shall at this point briefly indicate the nature of the reply to skepticism. As to sense perception, it can be said that the very fact that mind recognizes the inconsistencies of different reactions of different individuals and species is due to the ability of thought to formulate standards of truth. Doubt means inquiry, a thoughtful turning over of things, and this in turn implies reference to a standard. I cannot doubt the deliverances of sense unless I already have a standard. In physics we have our standard thermometer and our standards of weight and measure. In all our experimental investigations care is taken to have the standard constant and to eliminate all disturbing conditions. In science the statistical method has for its chief function the reduction of error to a minimum. As to thought, it must be admitted that knowledge does ultimately rest on assumptions. We do assume the validity of certain basic principles. The three laws of thought are illustrative of this, and in our empirical investigations we assume the uniformity of nature. Having made these the most universal and most fundamental working hypotheses, we then proceed to learn to control nature.

The ultimate standard of truth is not a judgment of all mankind, — "*tot homines, tot sententiae*" — so many men, so many opinions. There are all kinds of human thinkers, good, poor, and indifferent. Truth in science is not determined by counting heads or noses. Many heads have very little in them. Even in social and political matters, the majority is not always right. But there is, how-

ever, a criterion or standard. True propositions are those that are consistent with one another and with the further interpretation of experience.

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CHAPTER X

STOIC PANTHEISM

The spiritual conditions of the last centuries B. C. and the first centuries A. D. in Greece and Rome have already been touched upon. It is the task of the historian of social life to work them out more fully. What we do see is that there is an organic connection of the problems of philosophy with the life problems of a people. Philosophy is a statement of the spirit of the time. The old city state, which was the social and political form of Greece, was passing away and now large heterogeneous empires, first the Macedonian, which split up into fragments, and then the Roman threatened to absorb all these smaller states. As these empires grew larger they presented more and more a confusion of races, tongues, customs, beliefs and superstitions. By means of this confusion, the morals of the city states were broken down, and this was done on a much larger scale than in the age of the Sophists. The Romans were a formal, utilitarian people, who adjusted themselves to certain grossly practical needs, but they were never able to adjust themselves to the finer intellectual and spiritual demands without importing ideas. The Roman Empire became a great melting-pot of moral, practical, and intellectual interests. The Romans were not a speculative people, and with the single excep-

tion of law, they made no great creative achievements in the world of thought. This period is characterized by the growth of an intense feeling for both practical guidance and emotional consolation. Out of this developed the Epicurean and Stoic schools.¹

Epicureanism is a doctrine of prudent amiability. It teaches the individual the advisability of avoiding all entangling alliances. It urges men to live in the congenial society of friends and to cultivate only the gentle pleasures. This is a prudent and enlightened gospel of selfish amiability. It did not appeal to the nobler feelings and aspirations in man. It had no tonic effect.

The best forces of the Roman world rallied under Stoicism. Zeno, 336-264 B. C., was the founder of this School. He was followed by Cleanthes, 264-232; Chrysippus, 232-204; Panætius, 180-110; Seneca, 3-65 A. D.; Epictetus, first century, and Marcus Aurelius, 121-180. Stoicism is an ethics based on a religious metaphysic, namely, pantheism. Pantheism means the identification of God with the cosmos. God is the essence or the unity of the cosmos. He is wholly immanent, the One in All. Theism does not thus deny the transcendence of God. For the Stoic, however, the world is pervaded and penetrated by one spirit, the universal Reason, and this world-reason or world-

¹ The two great postulates of Greek thought are: (a) psychological—all desire the good; (b) metaphysical—nature is good, the good is sovereign. For the Romans *law* is sovereign.

soul is interpreted in other than idealistic terms. On the whole the Stoic conceived this permeating principle as a fine, all-pervading, fiery medium or ether, a sublimized breath, the cosmical "pneuma". From it all the elements, and all the cyclic transformations emanate. The "pneuma" is present in all things, but it is present in a preeminent degree in man. Reason is the germinating principle of all things, but in man it exists as self-conscious reason. It is the universal "logos" of which there is a spark in every man. Man is an individual expression of the world-soul, and because of this he is capable of communion with God. Man's destiny is to realize himself as a rational individual in communion with God. Man is to become what he is capable of becoming. It is given to man to live a life according to nature. Such a life is one of self-sufficiency, of independence from all the mutations of life. It is a life of complete imperturbability of mind. In such a life man realizes the divine image.

The "pneuma" in man and animals is part of the fiery cosmical spirit. The soul is a unity whose ruling principle is reason. The Stoics persistently emphasized the activity of mind in knowing. Knowledge arises in perception, but for perception to become knowledge there must be an active attitude of mind. The act of perception is the transmission of the perceived quality from the object to the mind,—and the mind reacts to this quality. In all of this process of the mind there is involved the unconscious operation of general notions. Mind

has general principles by means of which it lays hold of those qualities that are transmitted to it from the object. Each act of perception involves apprehension (*katalepsis*, *begreifen*), the laying hold of things. This active apprehension involves general notions, or concepts, or types, which are unconsciously and spontaneously present in the mind. The mind is adapted by virtue of its nature to grasp truth. This, the act of perception, is one which involves, on the part of the percipient, a laying hold on the object. Isolated perceptions do not constitute science. They must be bound together by reason. And it was to characterize this prerequisite that the Stoics used the word "conscience".

Reason is the highest quality in man; it is the divine spark. Reason unites men; reason is social. Hence the Stoics emphasized the social nature of man so far as he is rational. We were made for co-operation, but by our passions we are divided and sundered from each other. By the reason we are united. Hence the Stoics lay stress on the duty of man to fulfill his social obligations. The duty of man is to live according to the real nature of things, and, in so far as men do this, they are brothers. Earth is our dear fatherland, and we men are all brothers. The world is our home.

Man is man, not because of his language, or the color of his hair, or skin, or by any other physical accident, but solely through the exercise of reason. This is an anticipation of the Christian doctrine of the universal brotherhood of men. By virtue

of this notion of a common rational nature in man, the Stoical philosophy became the rational basis of Roman law. When Rome passed from being a city state to the form of an empire, the practical Romans were confronted with the problem of nationalization. The problem of the Parthian, Mede, Greek, Jew, Gaul, Briton, Teuton, etc., pressed for solution. All these tribes were parts of the Roman government. Now the Stoical philosophy suggested the solution in that it had developed the idea of humanity as distinct from that of Greek, Jew, etc.; and on this basis Roman Imperial law was constructed. Man as man was seen to be worthy of rights. It was on this Stoical principle that Roman law was made to rest. This idea of free personality as the subject of rights and duties has its development in Roman Imperial law, resting ultimately upon Stoical philosophy. This step was a most tremendous one for the organization of civilization.¹

Stoicism became the rallying point for the strongest spirits of the Roman Empire, and in addition to its appeal to these spirits, it had a very wide-spread influence. Teachers of Stoicism traveled about like itinerant preachers. They were

¹ There are three stages in the development of the Roman conception of *law*, which meet the developing needs of the Roman state: (1) the law of the city (*jus civile*) founded on custom and having to do with the citizens alone, (2) the law of nations (*jus gentium*) which applied to all freemen and (3) the law of nature (*jus naturale*) which applied to all human beings.

both the teachers and preachers of morals. These itinerant teachers were domiciled in the homes of the great. It was the work of such as these that really prepared the way for Christianity. St. Paul's sermon on Mars Hill undoubtedly refers to the Stoical hymn to Zeus, and throughout the New Testament many terms and expressions of stoical origin are used, as e. g., "in him we live and move and have our being".

Stoicism has deeply influenced many modern thinkers. Descartes was really a Stoic in his ethical attitude; so were Spinoza, Leibnitz, and others.

Why was Stoicism not the salt which was to save Roman society? Why was it not sufficient? The answer is, it was too cold and lofty for the masses of men. It did appeal to the high-minded man, but it did not supply any dynamic that could lift the average man above the range of his senses. It did not generate any consuming passion for humanity. The Stoic proclaimed that the masses were fools and only the few were wise. Stoicism thus, with all its optimism IN THEORY, did not supply a strong dynamic and a transfiguring hope as the days of the Empire's fall drew near.

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CHAPTER XI

MYSTICISM — NEO-PLATONISM

This too is a distinctive type — it is a new type of religious philosophy. Many attempts have been made to define mysticism. As I understand mysticism it is a doctrine which holds that it is possible for the human soul to have direct access to divinity. Mysticism rests on the assumption of the possibility of a direct and immediate communion with God, without the intervention of any intermediate agency. The essence of the mystic doctrine is that such a communion with the Godhead is possible.

The mystic way (*Mystica Via*) of course varies with the different types of mysticism. Quietistic mysticism, emotional mysticism, sensuous mysticism, et cetera, all elaborate various techniques for achieving the communion with the Godhead.

Philosophical mysticism has its greatest ancient representative in Plotinus. He is the classical example of ancient mysticism. He lived in the third century A. D. It is possible to trace down to the present the various lines of influence which he initiated. St. Augustine, John the Scot, Thomas Aquinas, Bruno, Boehme, Spinoza, Fichte, Schelling, the German Romantic School, Berkeley, the English poets — Wordsworth and Shelley, Bradley, Royce, Emerson, Bergson, and many others reveal this mystical motive.

Of late years there has been a pronounced revival of mysticism, and many books on the subject have appeared. "Studies in Mystical Religion" by R. M. Jones, "The Mystic Way" and other books by Miss Underhill, "Christian Mysticism" by W. R. Inge, and "The Mystical Element in Religion" by Fredrich von Huelgel, are some of the principal works on this revival.

Mysticism as a movement in Greek thought goes back to both the Orphic Mysteries and the Pythagorean brotherhood. The Pythagorean brotherhood was a society which had political tendencies. For us their chief interest is in their ethical tendencies. The reputed founder of this school is said to have taught at Crotona and to have died about 500 B. C. His life is veiled in legend. Plato is said to have visited this brotherhood and was much influenced by it. For Pythagoreanism, reality consists of numbers. Numbers are the ungenerated principles of things. They seem to find in the properties of numbers analogies of the facts of experience. They investigated the mathematical basis of music and were greatly influenced by the results of their researches in this field. These numbers are akin to the ideas of Platonism. The Pythagorean brotherhood was one that by dietetics and purgation aimed to develop the soul to where it could have the mystical union with the divine. Such was the motive of the Orphic Mysteries. Pythagorean writings had increased influence in the last century B. C. and in the first century A. D.

The failure of the rationally grounded ethics of Stoicism to satisfy the longings of the time, as shown by the violent reaction against sensualism and the protest against the social corruptions of the time, brought about an intense feeling of the opposition between the soul and the world, and between the spirit and the flesh. The developing influence of Pythagoreanism and of oriental cults brought to Rome, all point in the direction of the increasing craving of the best spirits of the time for direct union of the soul with the Divine. There is an insatiable craving for an authoritative communion or revelation from the Divine. In Platonism there was much to fall in with this tendency, and so the influence of Platonism came to be felt, and it was this movement which was carried on to its completion in ancient times by Neo-Platonism.

Neo-Platonism is thus seen to have been prepared for by Pythagoreanism. The Neo-Pythagoreans were eclectics who tried to fit together into a harmonious whole the fundamental elements of the preceding theories. This was the form of Pythagoreanism that was prevalent in the time of Plotinus. In various quarters we find that the mystical and religious side of Plato is eagerly taken up even long before the time of Plotinus. The estimable Plutarch uses Platonic philosophy to interpret religious differences. Philo Judæus is also seen interpreting Jewish religion in terms of Platonic philosophy. In doing this Philo posits the Logos as the creative principle of the world. The

Logos is the unity from which comes all ideas or logoi. It is the divine, creative word by which the world was fashioned. This creative word, the immanent, dynamic reason of God, operates in the world, and it alone stands between God and the world.

For mysticism the goal of life is the vision of God — it is deliverance from the world of sense — it is ecstatic union with God. This type of thinking was given its classic formulation at Alexandria, the city which was the next greatest center of philosophical activity after Athens. In this great, populous, rich, manufacturing city, all the streams of higher thought met, and here the foundation was laid for Christian philosophy by Origen.

Plotinus, 204-269, was a native of Egypt, and a pupil of Ammonius Saccas. In the year 244 A. D., he established a school at Rome, and after a period of ten years his famous school had the Emperor Gallienus and the empress aligned with it. Plotinus himself was a man of strong personality attested to by the fact that many noble Romans made him the guardian of their children. Having weak eyes, he did not like to write. It is for this reason that his works do not have the chiseled and the well-rounded symmetry which is characteristic of many other philosophies. His fundamental thought is that reality is through and through spiritual, and that it is One. The One or Monad is God, the Absolute. Below the One or the absolute Spirit is the "nous", and below "nous" is "psyche". Matter is potentiality. It is potentially all things.

At this point Plotinus also develops the conception of celestial matter, and this conception prevailed until the days of Bruno.

In man are "nous" (Spirit), "psyche" (soul), and "sarx" (flesh or body.) Thus there is a trinity in man. Objectively, body is the world as it is perceived through the senses; the soul is the world interpreted as a spatial and temporal order by the discursive reason, while spirit is the world as apprehended by direct intuition. Reality is really a trinity in unity. It is the intuiting "nous", the objects apprehended, and the act of intuition. The summit of knowledge is the attainment of a divine insight in which spirit is at one with the object. This fruition is the vision of God; it is the contemplation of God that is the ultimate goal of knowledge. The world of appearance is of scattered, disconnected, diverse, data. It is what William James called a big, blooming, buzzing confusion. But as this world is illuminated by mind, it is seen to manifest a unity. In this theory of Plotinus, there are two aspects which in a rough way correspond to the two phases of scientific analysis, i. e., to the inductive process of discovering the universal, and to the deductive process of applying the same. The first of these aspects in Plotinus is that which tells of the descent of existence from the Absolute. By the second aspect, Plotinus shows the mode of ascent of the soul to the Absolute. The Absolute, the One, is above existence, it is without form, it is before motion and rest; and to reach the Absolute one must pass beyond knowl-

edge. One must pass to the unity which is implied in duality. The Absolute is also the one universal good, which is above all things and the cause of all things. It cannot be named. It is above thinking: it is the cause of thinking. It is the first principle of thinking: it is the root of the soul. In brief, it is the absolute unity of truth, beauty, and goodness. In this way the highest form of reality is seen to consist of these ideas as a unity. This unity, this oneness of all things, is the indivisible root of subjectivity and objectivity, of thought and things. We thus see that this doctrine is a metaphysics of moral, æsthetic, and intellectual values.

How do the many arise from the One? This is the most difficult question in all philosophy. This is the question as to how we are to conceive of the embodiment of universals in particular existence. To this question Plotinus replies: The many arise by effulgence, by irradiation from the One. As light radiates from the sun, so by reason of his very fulness of being, individual objects emanate from the One. The One first expresses himself in "nous". This is the first step down from the Absolute to the many. "Nous", in turn, expresses itself by an outflow or a shining forth in the cosmic world. The world comes from the divine spirit or "nous". The soul of the world is the cause of all *things*. This world-soul is unmoved and eternal. The One in thus manifesting itself remains undiminished.

It is interesting to ask, what does Plotinus mean by the distinction of spirit and soul? The cosmic

soul is a vaguer principle than the cosmic spirit or nous; in some respects it seems to be less self-conscious than spirit. From the cosmic soul comes all individual souls. All souls are derived from the universal soul. Plotinus conceives of the soul as the meeting-place of intelligence and body, and he holds that there are three orders of souls, viz.: —

- a) Heavenly souls,
- b) Souls enmeshed in matter,
- c) Souls that waver between these two.

Our souls have pre-existed in the celestial world; they have fallen. Why did they fall? At this point Plotinus is not unambiguous. In some parts of his works, the view taken is the same as that in certain of the Platonic dialogues, viz., that the fall is a part of the divine purpose, while in other parts he holds that the fall is due to acts committed by the soul. The lowest step of existence is ensouled flesh. In this way we see the descent from the One to the many.

The prime interest of religion is to point out how the soul may ascend to God. In giving his interpretation, Plotinus rests continuously on the validity of his assumption that nature is the expression of the cosmical soul. And when the human mind begins to get its orientation in experience by ordering things in space and time, it begins to make its way back toward the Absolute. Space and time are both modes of discovering the One in the many. Now the universal soul is not in the world, but the world is in it. The world is in the universal soul; the universal soul depends upon the universal

spirit; the universal spirit, in turn, depends upon the One. Only by contemplating the One is it possible for the individual to realize his true destiny. Man has in him a fragment of the Absolute, and through insight and spiritual contact he becomes one with the Absolute. The individual passes through several stages. The first step in this ascent is the practice of social virtues such as wisdom, courage, justice, and self-control. The second step is the practice of purification (katharsis). At this stage there is effected a complete subjection of the flesh — a freedom from all thralldom to passion is attained.¹ At this point Plotinus uses the Platonic idea of philosophical love. Every soul by nature loves and desires oneness with another. But there are stages of this form of love. True love, as opposed to earthly love, is kindled by the vision of all things in one. The living soul through this love is transformed and embraced in the unity of the whole. The final step, — and this is one which requires intense concentration, is the direct union with the One. This stage Plotinus calls "ekstasis". It is an absolute self-surrender, "epidosis". This experience is that to which we referred above as being higher than knowledge. It is beyond knowledge; it is oneness with the One. This union with God

¹ Compare the Four Noble Truths of Buddha: (a) suffering is the accompaniment of change; (b) desire is the cause of suffering; (c) the suppression of desire is the only means of escaping suffering; (d) the three stages in the achievement of this suppression are uprightness, meditation and wisdom.

is attainable through concentration and self-surrender. It is a spiritual contact in which we reach the fountain of being, and in this experience the soul is alone with the Alone. Through these three types of experience, the individual is led to God; and in this beatific experience, the emotional aspect of which is characterized by Spinoza as "*amor intellectualis dei*", there is a contemplation of beauty, truth, and love. In this experience all separate existences have vanished as being illusory, and all individual souls have merged into oneness with the Godhead.

This Neo-Platonic view is the last speculative and religious effort of Greek genius. It is a universal philosophy, having incorporated into itself elements from all preceding philosophies save Epicureanism. It has already been stated that the growing demand of the social tissue was for union with the Godhead. This union is here made possible. This system also represents the consummation of Greek thought. It is interesting to note that many modern systems of philosophy are at heart the same as Neo-Platonism. When we consider the social and spiritual chaos of the time of Plotinus, it is not strange that his system should end with contempt for the present world, and that his system should embody what was the prevailing attitude of the day, viz., the desire for union with God.

Neo-Platonism failed. Christianity conquered. Why? Neo-Platonism was unable to tell men how to make the state of peace endure. It was unable to make its philosophy take hold of the masses. Its

method or way of ecstatic union with the Godhead was too hard for the ordinary man. It did not, and indeed by the nature of the case, it could not, present its way of life and salvation incarnated in a historic personality able to stir men's affection and command their loyalty. But this is precisely what Christianity did. The story is told of a certain propagandist of a new rose-water religion of universal philanthropy in the days following the French Revolution who, disappointed at the failure of his religion to make headway, asked advice of that old cynic Talleyrand. The latter replied: "I recommend that one of you be crucified and rise again the third day".

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CHAPTER XII

EARLY CHRISTIAN PHILOSOPHY

The original Christian Gospel was not a system of philosophy. It was a religion claiming the definite authority of a revelation from God, and it appealed primarily to the emotions and consciences of men. It enjoined certain principles of conduct. The motives to enable men to obey these principles were offered in the feelings of gratitude and love for the Savior who died for them and arose again, in the promise made of an immortal and blessed life for the faithful, and in the fear of divine judgment upon the disobedient.

While primitive Christianity was a religion and made popular appeal on these grounds, and while it continued, as in its origin it was, a movement within the Jewish Church, it did not make much use of philosophy. As soon, however, as it began to spread in the Roman world and came into contact with the civilization of the day, and indeed, even before it thus began to spread, it came into contact with the all-pervading Greek philosophy. The highest culture of the Empire was Greek in character, and in Alexandria the Jewish theologian, Philo, 30 B.C.-50 A.D., had already been deeply influenced by Greek culture. The Logos was conceived by him as the creative and revelatory Word of God, the immanent Divine Reason, operative in

the world and the unitary principle of the world of Ideas, Universal Types or Patterns, according to which all things were made. The early Christian philosophy is a synthesis of the Christian religion and Greek philosophy for which the Jewish-Greek philosophy of Philo paved the way. It was an attempt to state the fundamental principles of Christianity in terms of Greek philosophy. Just so in every age religion must either remain dumb or speak in terms of their functioning concepts, if it is to speak to the cultured.

The ethical content of Christianity is, in some important respects, closely akin to the ethical teachings of Plato and the Stoics. The Hebrew and the Christian conception of God as the Supreme Good is thoroughly Platonic, while the conception of God as over-ruling Providence is Stoic. It was because of the incorporation of these basic principles in the more spiritual forms of late Greek philosophy that Philo and others recognized an identity of doctrine in Plato, Moses, and the prophets. The Apologists of Christianity went further than this and held that the Logos was manifested in Socrates and Plato. Justin Martyr, who flourished about 140, the first one of these Apologists, was a philosopher dissatisfied with the results of Greek philosophy, and he turned to Christianity because of its practical fruits. He did not, however, give up Greek philosophy. He showed the harmony of Greek philosophy and Christianity. He regards Greek philosophy as being a preparation for Christianity.

1. ETHICAL CONTENT OF CHRISTIANITY

The ethical content of Christianity may be subsumed under the following eight heads: —

1. God is the spiritual Father of men.
2. Human souls are of supreme value in the eyes of God because men have within them by birth the capacity for realizing divine sonship.
3. Men should treat one another as brothers.
4. Divine sonship implies the practice of sympathy, service, cooperation, forbearance, and forgiveness.
5. The quality of man's character for good or ill and the judgment passed upon him by God depend upon motive and intent, and not upon external acts.
6. Nothing in the world has any value as against the right life of the soul.
7. The Christian ideal of life is to be realized in a new social order in which we shall treat all men as brothers in God.
8. This kingdom is to be ruled, not by force or external authority, but by motives of good will and love.

Christianity takes its origin from the life of an historic person who was believed to have sacrificed his life for men and to have arisen from the dead. His resurrection was taken to be the final authentic seal of the divine character of his mission. Jesus was held by his followers to have been, in a unique sense, the Son of God. The promise which

he made to send to his disciples, after his departure, the Holy Spirit to guide and inspire them, was believed to have been fulfilled. Thus the Christians believed in a triune God — Father, Son, and Holy Spirit. It is this connection of Christianity with an historic person that fundamentally distinguishes the Christian religion from Greek philosophy. As against this association with an historic factor, Greek philosophy dealt with eternal truths which have nothing to do with time and place. As time goes on in the last centuries B. C., there becomes manifest in the Græco-Roman world an increasing hunger for an authoritative revelation and way of redemption. Indeed, it was taught later that both Socrates and Plato were divine revealers. It was because of this general demand for the revelation of a divinely authenticated method of redemption that Christian teaching found ready response in the Greek and Roman world. Plato dealt with abstract principles and not with historical processes originating in specific individuals and going forward in definite places and times. The Logos was the connecting link for integrating Greek philosophy and Christianity. The Logos is the divine reason which manifested itself in the creation and the order of the world. It is the power of God immanent in the world. God in his fulness of being transcends the world but is immanent in the world through the Logos. In the Gospel of St. John Jesus is identified with the Logos or creative Word or Reason of God. The divine creative Word which issues from the

Father is held to have been fully incarnated in Jesus.

2. THE DOCTRINE OF THE TRINITY

The foundations of Christian philosophy were laid by Origen of Alexandria, (185-254 A. D.). God, says Origen, is pure spirit, the Absolute Creative Will, and the Logos is his expression. The Logos is a person, a being, distinct from the Father, but eternally generated from the Father. The Platonism of Origen is evident in his conception of the Logos as being the unity of all ideas. It is the *idea of ideas*. The creation of the world by God is an eternal process. It is really the eternal procession of spirits from God. Sin is the result of freedom and the fall into matter is the result of sin. Origen maintains that all souls shall finally be redeemed. Salvation is the eternal procession of spirits from their alienation back to knowledge of and union with God.

As to the relation of the Father and the Logos, it must be said that there was a long controversy before the question was settled by the Council of Nicæa, A. D. 325. The Arian party, so called from Arius its leader, maintained that the Logos was a second divine principle, created by and subordinate to the Father, and that it was not of the same substance. The Son therefore is an independent being and is not *very God*. The Son is a creature who by his own will raises himself to moral unity with the Father. Athanasius, who flourished about 338, and his party, contended against the Arians that God

verily entered humanity through Christ. They held that the work of Christ would be lost if God had not entered into Christ. Christ is of the *same*, not of *like*, substance with the Father-God. Christ has come to make us divine. Therefore the Son is God. The Logos is eternally begotten of the Father, and not created in time. The Godhead is a unity. Eternally the Father implies the Son as the spring implies the brook or as the sun implies the light. Therefore Christ is the veritable incarnation of God. He is of one and the same substance; his nature consists of a duality in unity, humanity and divinity in one self. The intent of this doctrine was to save the full value of Christ's work of revelation and redemption for humanity.

The Athanasian view triumphed. Its final triumph took place in the year 325. Most of those who passed upon the question were utterly ignorant of the finer points of the controversy. But the influence of the Emperor on the Athanasian side meant the overthrow of the Arian party. This triumph of the orthodox doctrine now raised new questions. If God the Father was in Christ, then he suffered when Christ suffered. From this position (patripassionism) many recoiled. The discussion at this point gave rise to the question of the relation of the two natures in Christ, the Monophysite party holding that there was but one nature in Christ, the Docetic party maintaining that the incarnation was only in appearance. The view finally adopted at the Synod of Chalcedon in 451 was that there are two natures in one personality

in Christ. The next problem was as to whether there are two wills or one will in Christ. The doctrine established as orthodox was that there are two wills corresponding to the two natures, the human will of Christ being subordinate to and in harmony with the divine will. This doctrine is called *dithe- litism*, the heretical view *monothelitism*. Finally, since the Holy Spirit was recognized as a distinct being, the immanent Spirit of God working in individuals and in the community of the faithful, the question arose as to the relationship of the three Divine Beings. The orthodox view of three distinct persons or beings, but so united as to form but one God, was finally accepted. This was a hard saying and the school of thought which gave the most plausible meaning to it, the Modalists or Sabellians, held that the three beings in the Trinity were only three distinct modes or relationships or phases of the life-activity of the one God.¹ St. Augustine, 353-430, the greatest and most influential theologian of the Christian Middle Ages and possibly of all Christian centuries, was a Modalist. He explained the Trinity as Divine power, wisdom and goodness, after the analogy of the human soul which is a trinity-in-unity of will, thought, and feeling. For us as students of philosophy, the important point is that the doctrine of the Trinity was the vehicle by which the Platonic philosophy was transmitted to the Celtic, Teutonic, and Slavic peoples, and thus

¹ The Greek terms for *person*, Latin *persona*, are *ὑπόστασις* and *πρόσωπον*.

entered into the thought of the whole Christian world.

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CHAPTER XIII

MEDIAEVAL PHILOSOPHY

The period called the Middle Ages extends approximately from 450 to 1500. It is a period characterized by the gradual development of a new civilization. The Roman Empire of the West had suffered disintegration from internal complications and the impact of the Teutons. Even in its original home the march of Roman civilization was arrested in many vital respects. The Mediæval civilization was built in part on the ruins of Roman civilization, and it gradually developed into a type of civilization which has maintained itself on into modern days.

Modern civilization is more like Greek culture than it is like Mediæval culture. It is rationalistic in that it rejects the authority of organizations like the Church, custom, and tradition, and in that it critically examines facts, beliefs and theories. In Mediæval culture the principle of authority rules. Values are a miraculous contribution from an alien and supernatural source. Modern culture is also naturalistic. It looks with open-eyed interest at the facts of nature, which it regards worthy of consideration and proving. Mediæval culture, however, regards the world of nature as tributary to a world of grace. The supernatural realm is the real realm. Such hymns as "Oh Mother Dear, Jerusalem" reveal for us the main features of the

Mediæval attitude. There is embodied here that sense of other-worldliness, — we are but “strangers and pilgrims here below”. For the child of modern culture their point of view has lost its validity. Our eyes and interests are fixed on another realm — this present world. Furthermore, modern culture is humanistic; it aims at the fullest development of human powers here on earth. *This* world is the *locus* of the modern man’s interest. For the Mediæval thinker, man is a dual being whose earthly interests are to be completely subordinated to the heavenly; he is a brand to be snatched from the burning. This is the dominant *motif* of the whole period.

Man’s vocation is not viewed as being the process of developing and enjoying all his powers and interests. Man is to subordinate the so-called natural man to the spiritual, the supernatural and the super-rational. It is no exaggeration to say that the spirit of Neo-Platonism and Mediæval Christianity are identical. Both involve the dualistic conception, and both explain the presence of spirit on earth as the result of its sin and consequent fall. The way of redemption is the way of escape from the prison-house of the body by a super-rational process. It is indeed no accident, but part of the logic of thought and history that St. Augustine, whose thought dominated the whole Mediæval Church, was a dualist. Before becoming a Christian, he was a Manichæan, and still later he was a Neo-Platonist, and even in his latest stage he adhered to the refined dualism of Neo-Platonism.

Mediaeval culture was begun and built up chiefly through the Church. This development was peculiarly facilitated by the disintegration of the Western Roman Empire. The Church was well organized and the Bishop of Rome, by virtue of the political and historical prestige and power of Rome, became the head of the Church. The Church remained the one stable, continuous form of cultural organization during the long period of transition from the ancient to the modern civilization. The Church was the vehicle by which there was preserved something of the old Roman culture and through which that culture was effectively brought to bear upon the barbarian peoples. The Church was the instrument by which the education of these crude tribes was carried on. Deeply indeed were they impressed and awed by the Church. The splendor of its services appealed to their minds. It was thus the Church that laid anew the foundation of civilization and began building up a new culture. It was the one all-embracing social institution. It claimed authority over all principalities and powers; it controlled the individual from the cradle to the grave, and beyond the grave.

There were no sharp lines between political, religious, scientific, and philosophical thought for the Mediaeval mind. Theology was held to be the queen of sciences and philosophy was but her hand-maid. Political and other species of social authority were held to be derivative.

The Mediaeval mind was animistic. It believed itself surrounded by hosts of spirits and demons.

Satan strode abroad over the land. Even Luther, the great Reformer, believed in Satan, spirits and demons, in the same way as did the typical Mediæval man. The people then believed in magic. Miracles frequently happened then—they still happen in Quebec. (This is the point of view of primitive thought).

The materials which the Church employed for educational purposes were the following: Trivium, which gave instruction in grammar, logic, and rhetoric, and Quadrivium, which was a course in music, arithmetic, geometry, and astronomy. These were taught from compilations. There was no direct acquaintance with the original Greek. There were, it is true, translations of parts of Aristotle's Logic together with commentaries by Boethius. Plato's *Timæus* and the writings of Cicero and of the Church Fathers were also available in the Latin tongue. From 500 to 1000 A. D., a period which is called the Dark Ages, there was only the most elementary form of education, and in this long period there was only one isolated intellectual phenomenon that relieved the blackness of this dark night. He was John Scotus Erigena, a profound thinker who flourished about 850. After 1000 A. D., a distinct revival of philosophical activity took place. Scholastic philosophy was developed at this time. Scholastic philosophy developed rapidly and culminated in the thirteenth century. The first great Scholastic philosopher was Anselm, who flourished about 1075 and who struck the key-note of Scholastic philosophy when he said: "*Credo ut*

intelligam". This is the Scholastic key-note. Abelard showed himself to be a heretic by assuming the standpoint: "*Intelligo ut credam*".

The Church had settled all fundamentals as to man's origin, nature and destiny. The Church had settled the metes and bounds of all knowledge. God created the world good; man fell, the Son of God was sent to redeem the world; the Church was the one custodian of all the instruments of salvation. Philosophy was to move and operate only within the limits of Church dogma. First of all the Scholastic philosopher bows to the authority of the Church; he then proceeds to defend the whole doctrine of the Church. The Church gave an intellectual map which charted all things — the origin, destiny and nature of everything in earth, below the earth, above the earth, and in heaven above. This doctrine culminated in the *Summa Theologiae* of Thomas Aquinas (1225-1274). He was the great organizer of Scholastic thought, and he shows that when reason reached its limits then revelation completed the edifice of truth.

One of the main causes for the development of Scholastic philosophy was the immaturity of the European mind. Even in the thirteenth century, with all its great activities of cathedral building and the organization of industries, there was this general immaturity of thought.¹ It was about this time that

¹ I have been told that this immaturity of mind is revealed in the construction of mediæval castles which sometimes had foundations thirty times broader than was necessary to carry the superstructure.

first-hand knowledge of Aristotle was to be had for the first time in western Europe. The Greek text was now brought in. This system quickened the mind of Scholastic thinkers and gave them method and scope which they had not had before. It is christianized Aristotelianism that we have in St. Thomas Aquinas. Although in 1215 Aristotle was condemned, he was, about ninety years, later recognized as the precursor of Christ, and was made the supreme authority in philosophy.

At the very time that Scholastic philosophy culminated, the seeds of decay were beginning to germinate. In England, the Ionia of modern philosophy, Duns Scotus (1265-1308) denies that philosophy has the scope which Aquinas maintained, and he struggles to separate religion from reason. This brilliant dialectician was followed by William of Occam who went still further in attacking the philosophical presuppositions of the Scholastic system. At about the same time Roger Bacon turned his back on the whole system of Scholastic philosophy and forcefully advocated the open-eyed study of nature.

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CHAPTER XIV

REALISM, NOMINALISM, AND THE PROBLEM OF INDIVIDUALITY

The preceding lecture has emphasized the outstanding characteristics of Mediæval culture. It has done this by contrasting the Mediæval culture with Greek culture. In the twelfth, thirteenth and fourteenth centuries, which are the great centuries of Mediæval philosophy, the Scholastic philosophers debated with great vigor three great doctrines, namely, *realism*, *nominalism*, and *individuality*. The relation of the universal to the particular is the quickening motive of the problem of individuality. This problem is involved also in the application of the first two to human nature. As a correlate to these, is the problem as to whether the intellect or will is central to human nature.

The question at issue between realism and nominalism seems to us very much like hair splitting, but such feeling is due to our ignorance of the real nature of the controversy. This same problem is today the very core of the most controversial aspects of our basic problems. Mediæval realism is the doctrine which argues that the universal, in the Platonic sense, has an existence superior to the particular, that it exists eternally, and that it is the *cause* of the particular. The universal, or type, is not only logically prior, but is also existentially

prior, to the particular. The universal "humanity" is the cause of the particular human beings. The logical and existential priority of the universal to the particular is expressed by the realist in the phrase: *Universale ante rem*. How do these universals exist before the things? The opinion of the Scholastics is that they are the forms, or types, according to which God creates particulars. They exist before particular things in the mind of God. The second position of realism as to the nature and status of the universals is expressed in the phrase: *Universale in re*. These universals are the common nature or the common essence of particulars. If we have a given lot of particulars, we discover that the universal is that which exists in them as their common nature. The third phrase: *Universale post rem*, means that universals exist in our minds only in the sense that through reflection we gradually arrive at a knowledge of the eternally existing universal real. We first perceive particulars, and then get their common nature. We do not start out with a ready-made kit of universals in our minds.

The position of St. Thomas Aquinas is that these universals first exist in the mind of God. The name Moderate or Aristotelian Realism has been applied to this standpoint. Extreme realism maintains that all individuals are illusions. It argues in an Eleatic fashion that there are no separate individuals; universals alone exist. The extreme realist is therefore a pantheist, and the fact that such a position is incompatible with Christianity

doubtless deterred many from espousing this standpoint. Why was this question of such consuming interest? To show the interest of it *then* and *now*, it is necessary to contrast the standpoint of moderate realism with that of nominalism. Realism views the universals as being superior realities. *Nominalism* says that universals are nothing but words, — *flatus vocis*, empty sounds. It was about 1090 that nominalism was given a great impetus by Roscellinus. For over two hundred years the nominalistic position suffered an eclipse. It was not till the time of William of Occam, who flourished about 1330, that nominalism had its next great advocate. He says that only the particulars are real; the universals are mere names. There is no such thing in reality as goodness, justice, or triangularity. The world consists of an aggregate of particulars, and what we call universals are names that we attach to the similarity between objects. We see objects and we note that they have certain common features. The generic term *humanity* is a name for those that have those common features. We give these generic terms not only to objects, but also to various acts and processes which are like each other. Nominalism is not a defunct doctrine. It is what is known in modern thought as extreme empiricism. Such empiricism holds that what we perceive through the senses is the only reality that exists. What you think is but a copy of what you perceive.

Realism is a term frequently used with regard to a movement in literature, and in this connection

it means that art is to embody things as they are in the outer world. Mediæval realism has a different meaning from this. It means that *universals are real*. Realism in literature is just the opposite of this type of realism. The fundamental doctrines of the Church were given a philosophical basis by the realistic formula. God is one substance in three persons. The Church also taught that the whole of humanity was involved in the consequences of Adam's transgression. Humanity is one and so the fall of Adam entailed the whole human race. "For as in Adam all die, even so in Christ shall all be made alive". We are all parts of a whole, and not separate individuals. All men are saved in Christ. He is the typical man, the universal man, present in all men. The Church holds that it itself is made after a pattern laid up in heaven, and because of this the Church is more real than the individuals which compose it. This realistic motive is also the philosophical basis of the Church's doctrine of the Lord's Supper.

The culture of the Church conceived all existence to be arranged in hierarchical order. At the top of the hierarchy is God, and next, the angels. In God and the heavenly world are to be found all the types of earthly existence. After the fashion of Dante, our earthly existence is viewed as being only an allegory of the divine order. The earthly order is only a preparatory stage for the celestial order.

If the world of universals is thus so much more real than the particulars, the latter order is to be

saved only by the descent of the universals into this order, and thus is the earthly order transfigured into the semblance of the divine. If the universals are so much more real than the particulars, then what is to become of the particulars? We feel ourselves to be separate beings. We have each his own inaccessible citadel of personality. Each person is an isolated, unique being. How often do we feel that nobody understands us! Uniqueness, isolation, privacy—these are marks of our personality. What becomes of this if the universal is the more real? Our feeling of freedom and our sense of responsibility point to the reality of the individual. How can this be? Aquinas said that matter is the principle of individuation: As forms, all souls will be identical, but as *embodied* they are different. We are individuals therefore in consequence of bodies. To this position Scotus replies, that when we slough off this mortal coil, then we must lose our individuality. Scotus said that it is not in the fact of the mere embodiment of the soul that individuality is effected. It is not body that makes individuality, for surely God has no matter. Each individual is real as a soul. Each soul has its *hæcceitas*. Each thing is a unique thing and has its own being. The fundamental thing in individuality is will, says Scotus, and in this he anticipates current psychology and philosophy. But Aquinas held that intellect was prior, and in doing this he is doing just what we would expect him to do in the light of the rest of his system.

The question as to the primacy of the will or the intellect comes out of the preceding inquiry, i. e., as to universals. Will is primary for Scotus, and in consequence of this he defends free will from the indeterministic position,—man has the power of free choice. As time went on nominalism gathered constantly increasing momentum and in William of Occam we have one of the acutest and subtlest thinkers championing the cause of nominalism. Universals exist only in the thinking mind, says Occam. Individual things alone are real. Our intuitions are natural signs of things and are not the immediate presence of things themselves. We do not know things as they are. We know them only in their second intentions. With the increasing interest in the study of nature and with the development of nationalities, which involved the throwing off of ecclesiastical and political authority, there is a constantly growing interest in the nominalistic standpoint. The great development of dialects and languages, and the emergence of the empirical study of nature fostered nominalism.

The empiricist is ever prone to regard concepts as abstractions which are derived from the inspection of particulars. Concepts are mere names for the empiricist. The basic motive for this view is the fact that he is prone to say that the psychological steps by which we get knowledge is all there is to knowledge. He does not seem to be conscious of the difficulty involved in the assumption of laws and abstractions which are valid for our own experience, but which have nothing in nature, as per-

ceived through the senses, corresponding to them. In science we constantly classify facts and correlate them causally. Every exact law of science presupposes that nature is a kind of crystallized mathematics. We generalize so as to forecast and predict, and this certainly implies that there is a rational structure in nature. But nominalism reduces science to a set of names that do not approximate reality. It makes reality a chaotic mass or aggregate of isolated particulars. Many people today smile at these old controversies. They do not realize that the same controversy is involved in the existence of the state. Are we isolated individuals? Is society simply a mass of separate individuals? This is the position of anarchy. There are thousands in our own Republic who do not realize the significance of this conception with reference to the nature of the state. For very many the state is only a milk-bucket. On the other hand, there is the equally vicious and defective view that all individuals exist *for* the state. The question today is as to where lies the seat of a rational and just authority of society over the individual. Thus the old question of Scholasticism is the central question of today. Are the state, justice, — merely empty names? Is society only a horde of self-seeking individuals? Plato represents the state as the magnification or projection of the individual. It is the great instrument for the development of the soul of man. The anarchist would achieve the welfare of man by shattering the state and all social authorities into fragments. He would get harmony

through the spontaneous action of the individual atoms in society.

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CHAPTER XV

MODERN PHILOSOPHY: ITS SPIRIT, ITS CHIEF PROBLEMS, AND ITS STANDPOINTS

Modern philosophy did not come into being suddenly. Even back in the thirteenth and fourteenth centuries, men like Roger Bacon, Duns Scotus, and William of Occam, advocated the separation of philosophy from theology. In this way these men claimed for philosophy the right of free and independent inquiry, while at the same time they recognized the practical end of theology.

Nicholas of Cusa, 1401-1464, a prominent churchman, developed a system of philosophy that was quite independent of Scholasticism. This system has a Neo-Platonic and pantheistic trend. The central thought of this system is the concept of the unity of opposites; God is the unity of the infinite and finite; man is the unity of soul and body. In the next century Paracelsus, 1493-1541, a strange figure, an alchemist, a mystical pantheist, a physician, founder of a school of medicine in which were made some of the first systematic experiments in chemistry, gives us a philosophy which is a strange blending of superstition, daring speculation, and anticipations of science. His system is a mixture of three basic motifs, namely, Neo-Platonism, animism, and science (Vide, Browning's Paracelsus).

The first really *modern* system is that of Giordano Bruno, a man burned at the stake in Rome in the year 1600. He was burned as a heretic and thus suffered martyrdom for the cause of free knowledge and science. Three hundred years later, a great bronze statue was erected to him. His work is the first modern system. It is penetrated through and through by the idea of the infinitude of the universe. God is held by him to be the immanent unity of the universe, the all-pervading soul of things. God is the unity of opposites, the one in the many. He conceives of the material world as being made up of indivisible monads, and that there are physical and psychical monads. These monads are the elements of which the world is made.

The first scientifically developed system is that of Descartes, 1596-1650. The poetic impulse of Bruno is lacking in Descartes, who is a rigorous thinker. Soon after Descartes developed his system Hobbes worked out his materialism, and in rapid succession we have given us the systems of Spinoza, Leibnitz, Locke, and Berkeley. These names show that the seventeenth century was a period of great metaphysical systems.

All modern philosophy is rationalistic. It uniformly rejects authority and persistently works independently of ecclesiastical dogmas and religious beliefs. Its one standpoint is that of rational inquiry into nature and the meaning of experience. This revolt against authority and tradition is seen in other fields than science and philosophy. In the reformation movement we have the rejection of the

authority of the Pope in ecclesiastical and religious matters, and particularly the rejection of his right to interfere in matters of state. The Reformation is thus partly religious and partly political. This revolt goes hand in hand with the development of nationality and of regional government, and the beginnings of movements toward democracy.

The demand for representative government which was successively successful in England, France, and America, is now engaged against the last citadel of feudalism in Europe. Out of this movement developed the doctrine of the natural and inalienable rights of man, a doctrine which was expressed in its most classic form at the time of the French Revolution.

The chief social and cultural influences which resulted in modern thought are the following:—

1. The influence of the Crusades in contact with the culture of the Saracens.
2. The culture of the Renaissance. Here we have the first-hand acquaintance with the classics of Greece.
3. The growth of the spirit of nationality, or a sense of the rights of the local, social and political organizations.
4. The influence of the Reformation in the matter of the rejection of papal authority in matters of religious observance and belief.
5. The influence of the doctrine of natural rights.

6. The new discoveries in geography and natural science.

Of these influences the new natural science is by far the most potent.

The second great characteristic of the spirit of modern philosophy is that it develops in the closest association with the special sciences. Until the very end of the eighteenth century, mathematics, astronomy, and physics not only exercised a great influence upon philosophy; they even determined the very structure of philosophy, and in the nineteenth century the biological sciences, with their all-embracing generalization of evolution, also molded the new types of philosophical doctrine. This close relation of the sciences and philosophy in modern times is shown by the fact that many of the leaders in the development of science have been philosophers. Descartes was a great mathematician and physicist. Analytical geometry is largely a creation of his genius. Leibnitz, an eminent mathematician, geologist, physicist, chemist, comparative philologist, philosopher, et cetera, invented the calculus, and in this way we see the organic relation between philosophy and science in his case. Locke and Hume were analytical psychologists, and furthermore, they were great psychologists and political thinkers or social philosophers. It is not until William James that we have another English-writing psychologist who ranks with them. Locke was a great political philosopher, and Hume was an eminent historian. Kant was a mathematician and a physicist; he formulated

the nebular hypothesis. It is only our second or third rate philosophers and scientists that fail to see the close relation between science and philosophy.

The significant, new thing in the background of modern philosophy — the novel standpoint in thought that shapes the point of view of much of modern thought, is the development of a mechanical view of the world. It is the conception of nature as a vast mechanism, infinite both in extent and in the complexity of its details. At the same time it is a mechanism whose fundamental principles of operation are known. Nature is viewed as a self-running mechanism. Four men of the highest importance have elaborated this doctrine. They are Copernicus, Kepler, Galileo, and Newton. Copernicus in his astronomical theory originated what is perhaps the most revolutionary thought of the ages. His theory loosened all the foundations of science and religion. Kepler formulated the laws of planetary motion. Galileo gave an experimental foundation to this theory and established many principles of modern physics. In addition to this he made many discoveries of apparatus for laboratory purposes. One of the many things which he worked out was the determination of the concept of acceleration. In this way he showed that the rate of falling bodies is not a function of mass. Thus at this time a dogma which was accepted from the days of Aristotle was shown to be invalid. Newton by his formulation of the laws of motion was able to bind all into one comprehensive synthesis. His formula is a generalization which involves the result of the

researches made on falling bodies, the pendulum, and the planets.

Galileo had a clear conception of scientific method. He argues that what we can measure we can know. The book of the universe is written in mathematical characters. All changes in nature are the results of movements of atoms, but the secondary qualities of bodies are only subjective. In the year 1633, Galileo was forced to recant, but a little after having made his recantation, he raised his eyes to the stars, and while looking into that far-off region which he knew so well, he involuntarily exclaimed: "And yet it moves". The background of modern philosophy is this development of the mechanical conception of the universe. The mediæval philosopher viewed nature animistically and teleologically. A problem that becomes acute for the modern philosopher is this: If nature is blind and insensate; if all that takes place in nature is the result of mechanical impact; and if all the motions of the heavenly bodies and all the changes that take place in the universe can be explained without assuming any interference of mind, then what becomes of mind, of the soul and spirit in the universe? Are these not superfluous and antiquated conceptions? The first and greatest problem of modern philosophy is this: What is the character of reality? and how are the soul and body to be related? If nature is only an infinite machine; if this is all that there really is, then spirit seems to be a mere by-product of this machine, and science, language, art, music, and religion, seem to be re-

duced to the status of glandular secretions. If nature is only mechanism, then there is no ground for assuming that purpose operates, and we must abandon entirely the teleological conceptions.

The great 17th century systems are attempts to answer in all the logically possible ways the question as to what is the relation of mind and body, spirit and matter.

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CHAPTER XVI

THE PROBLEM OF REALITY

In this problem, there are two main questions at issue: (a) What is the nature or character of that which is real? (b) What is the relation of the part to the whole, or, what is the place of the individual in the Universe? The central interest in this latter question for us is: What is the place of personality in the universe? In connection with this latter question emerge the problems of the meaning of personality, freedom, and immortality.

The first question seeks to determine what is the abiding *substance* of things, or, what are the *substances*? It is in terms of the concept of substance that the four typical answers to this question were given in the 17th century. By substance was meant that which is permanent, that which exists on its own account. Substance is that which is an independent and not dependent existence. In the textbooks on metaphysics, the ordinary classification of problems and theories is as follows: ontology, cosmology, and psychology. Ontology is the theory of the nature of being. Cosmology is the theory as to the nature of the universe. I find it unprofitable to thus separate ontology and cosmology.

What is the substance or permanent qualitative nature of things? We have four types of answers to this question:

1. Dualism,
2. Materialism,
3. Spiritualism or Idealism,
4. Neutral Monism, or the Identity Hypothesis.

Dualism is the common sense theory, and has its classical formulation in Descartes (1596-1650). This theory is held also by Locke (1632-1704), Kant (1724-1804), McDougall, Bertrand Russell, Bergson, and many others. This theory rests on the assumption that there are two substances, viz., mind and body in man, spirit and matter in the universe at large. The three remaining theories are all monistic. Materialism is the view which we find in Hobbes (1588-1679), Priestley (1733-1804), Holbach (b. 1789), La Mettrie (1709-1751), Büchner (1824-1889), and Haeckel (b. 1834). There is one substance, viz., matter in motion, and to this view belong some of our current views resting upon the conceptual constructs of atoms and electrons. Spiritualism or Idealism assumes that the substance of things consists of minds, their activities and their contents. The leading representatives of this view are Berkeley (1685-1753), Leibnitz (1646-1716), Fichte (1762-1814), Hegel (1770-1831), Schopenhauer (1788-1860), Lotze (1817-1881), Green (1836-1882), Bradley (b. 1846), Bosanquet (b. 1848), and Royce (1855-1915). Neutral Monism or the identity theory is the doctrine that reality is neither physical nor mental — it is both physical and mental. Reality has these two aspects, and these two aspects are parallel manifestations of the

same underlying substance. Representatives of the identity theory are Spinoza (1632-1637), Schelling (1775-1854), Avenarius (1843-1896), Spencer (1820-1903), Mach (1838-1916), James (1842-1910) and some of the new Realists of today. These views are all designated *qualitative monisms* inasmuch as they maintain that there is only one kind of being.

The second question referred to above is that as to the relation of the parts to the whole. What is the relation of the unity of the universe to the parts that are in it? We find here two main types of theory, viz., Monism or Singularism and Pluralism. Here the question is not, *how many kinds* of being there are, but *how many beings* are there. Spinoza is a monist of both kinds. There is for him only one being and only one kind of being. In many respects this Spinozistic view is the doctrine of Hegel, Royce, Bradley, and Bosanquet. For all of these there is only one, ultimately real, absolute, all inclusive being. The other theory is that finite beings, especially human personalities, have a distinct and separate existence and that they are not parts of God. They are private and unique beings, but not, however, without relations to one another. It was this problem that was central with the Stoics and it was at this problem that they persistently hammered. It is from this point of view that we see the metaphysical significance of the different types of philosophy of the State. The State for the singularist view is the *all-inclusive unity*, an all-inclusive world-State. The democratic or pluralistic conception, however, is that the State

is a human device set up to enable us to get along. The State is an instrument, a tool. *We are not its tools, it is our tool.*

Among the great Pluralists are Locke, Berkeley, Leibnitz, William James, Bergson, and James Ward.

NOTE. Bergson sets out from dualism, and the opposition between matter or extension and the life-force or duration is the prevalent note of his system. But, in places, e. g., at the conclusion of *Matter and Memory*, he reduces this opposition to a difference in degree of tension in the universal movement or mobility which is the real

The *neutral monism* or identity theory of James only found utterance, in his concept of *pure experience*, in some of his later essays. (See his *Essays in Radical Empiricism*). James here takes the original *neutral stuff* of reality to be an undifferentiated experience on a vast scale and free from the impurities introduced by the contrasts we set up between the physical and the mental, the unconscious matter and the conscious life, of common sense thinking. In this pure experience my pencil would be neither physical nor mental, but when I place it *in space-relations* I make it physical and where I call it a *percept* I make it mental. It is really the same pencil all the while, just a bit of pure experience. He neither explains where we are to find experience in its purity, nor why it should ever become bifocalized. I find myself unable to abolish the distinction between my consciousness of an object and the object.



CHAPTER XVII

DUALISM

This theory assumes that there are two distinct substances. In the human individual they interact. This is the common sense view. It is based on what appears to be glaring distinctions. When we will a mental process, we determine a bodily movement. In tight places we frequently discover that we can do things with our bodies that we never thought we could do, e. g., in situations of fright and in athletic contests, et cetera. Conversely, bodily conditions influence mental processes.

When, however, we consider the respective properties of mind and body, we find that they are sharply contrasted. While body is a *divisible mass*, *extended* in space, mind is an *indivisible unity*, having *no mass* or *extensity*. Again, body seems at all times to be determined from without, while mind is a self-determining, self-directing principle. Mind has interests and seeks to realize values. It is purposive and develops new interests and values, and continually devises new means to realize its values. The dualistic theory thus seems to be based on obvious facts and contrasts in respect to the relation of mind and body. The Cartesian dualist says that the body apart from mind is mechanical, a system of juxtaposed points moving in space. In this way

he assumes that the body is a mere machine. Such was Descartes' view. He held that animals had no minds and, therefore, were automata.

What are some of the objections to this theory? First of all, it is inconceivable and inexplicable how an unextended principle can act upon an extended principle; because of this it is said that the relation cannot be explained. To this objection, however, the dualist may reply that many inconceivable things are facts, and he will urge that it is our province to be guided by facts rather than by considerations of inconceivability. The second objection to dualism is this: That if mind acts on body, then the principle of the "conservation of energy" is violated. This principle is the statement that in all changes or transformations of energy in the physical series, there is a mathematical equivalence. So much energy of one kind produces so much energy of another kind. Throughout the series there is a constancy, there is a strict quantitative equivalence, thus precluding either the creation or destruction of energy. Now in the interaction of the dualist, there is energy injected into the physical series by the action of the mind on the body, and this injection means the destruction of the principle of the conservation of energy.

To this objection the dualist may reply: The amount of energy injected into the physical series by mind is too small to be detected by our most refined instruments. The objector would object again to this reply by saying, that, though such a position is plausible, it does violate the principle

of the conservation of energy. A still further dualistic reply might be something like that which Lotze indicated, viz., the passage from the one series to the other is on the whole balanced; and there is thus no loss or gain. This also is very plausible, but it entangles the dualist in a further difficulty and one of such a character that if the dualist adheres to it, he ceases to be a dualist. If energy can thus be interchanged, then energy is the common denominator of both series, and mind and matter are only forms of a common principle. The dualist has still a third answer which is to the effect that the mind directs the body but uses *no* energy in so doing. The advocate of this view might point, for example, to an engineer directing a great engine by a small lever, or, to such an incident as President Wilson pressing a button at Washington, thus setting in motion all the machinery in a large exhibit on the Pacific coast. But the President did use energy—he pressed the button—so this answer also is invalid. Still a fourth reply might be given by the dualist. He may argue that the principle of the conservation of energy is a working hypothesis for the physicist when dealing with strains and tensions, and with mass particles. He finds that the principle works, but his point of view, says the dualist, is abstract, and from a total point of view there is no reason for assuming that the physical series is a closed one. When we take the whole of experience into account, it is seen to be too complex for one to be justified in saying that the principle of the conservation of energy is absolutely valid.

This principle when considered in connection with the second law of thermodynamics (the entropy of a physical system tends to increase) breaks down as an ultimate principle for interpreting experience. In actual physical changes, work and motion are effected only through the loss of available heat energy. In the doing of work, energy is passing from available to unavailable forms, from unequal to equal temperatures. Energy generated by a waterfall may be harnessed and made to drive wheels or other types of machines. But a large proportion of the energy of the waterfall is dissipated in the form of heat. If the sum-total of energy in the universe is constant, and if the doing of work always involves passage from available to unavailable forms, then either the universe is finite in duration, or there is a creative source of energy which compensates for the passage of available into unavailable forms. If we do not assume this, then we must assume that the universe is running down, i. e., is tending to equilibrium, and that the time is coming when there will be *nothing doing*. If the universe has existed through infinite time, then it must have run down long ago. Infinite energy, in amount, is not a sum-total; it is not a so-much. A universe which had no beginning is not finite and it has no ending. Thus we are led to the view that the universe cannot be a perpetual motion machine containing a definite quantum of energy. The second law of thermodynamics, when thought out, requires us to assume, if the universe is endless in duration, a Creative Source of Energy.

The discussion of the above point brings us directly to another problem, namely, what do we mean by matter? Common sense dualism holds the view that matter is what we perceive. When the dualist believes in interaction, he means to say that an unextended entity is seated somewhere in the brain and directs it. The scientific conception of matter is not identical with this common sense view, and this difference is seen in the fact that the man of the street is a *naive realist* as regards the problem of our knowledge of reality. He believes that the real, external world is just what we perceive and exists, just as we perceive it, independently of our perceptions. The *idealist* points out that what we perceive does not exist independently of our perceiving it. The world of experience is, he shows, a world of sense qualities. It is a congeries of sense qualities having temporal and spatial relations. Now sense qualities are just things perceived by minds. The idealist asks this question of the naive realist: If sense qualities, which are all that you perceive, are independent of the mind, how do they exist when no mind perceives them? Is there color when no one is looking? Is there sound when no one is listening? Sometime ago I read a book entitled, "Light, Visible and Invisible." Such a title is really tantamount to the expression, untasteable taste, unhearable sound, or unseeable light. This is nonsense. If the naive realist says that he thinks qualities are independent of mind, what is the nature of these qualities when not perceived? If I were to bring before this class

a band of colors, dollars to doughnuts, the girls would recognize the differences between them better than the boys. Were there a number of musical instruments played here now, many of you would recognize distinctions which others would not hear at all. We do not all agree either as to the number or the relations of space, time and intensity in sense qualities. Sense qualities are variable functions depending on senses, mental and physical habits, interests, et cetera. That which exists apart from our perceiving is nothing but the abstract possibility of further perceiving. Then what exists in the moment of perception is not matter, but experience. The physical world is just this *possibility of experience* for all. *It is social possibility.* What we mean by the physical world, the idealist argues, is something that can be perceived, if there be someone to perceive it, and can be perceived by all percipients. Now we do not all agree as to its qualities and relations, but we attempt to overcome this subjective perceptive standpoint by means of quantitative ratios which serve as tests of commonness or social perceptibility, and it is this that is the basis of our belief in the external world. The latter is the realm of common or social percepts and perceivables.

Now the question arises what is matter in itself as it is apart from perception and experience? The scientific dualist, who believes in an independent matter, says to the idealist, you must admit that something independently real is the cause of what we perceive. To perceive there must be an



objective cause or ground of our perception. We do distinguish, says the dualist, between perceptions and images, between realities and illusions.

Were I to say to this class, look at that striped tiger in the back of this room, you would immediately think I am experiencing illusions. The victim of delirium tremens sees snakes crawling about him, but we can neither see them nor touch them. We do not have the same images and perceptions that he has. His visual images are incoherent with tactual percepts and with all our percepts. Thus we say he is in an abnormal condition, whereas we are normal. Illusion is thus a test of the distinction between appearance and reality. We say that that which resists our wills, our purposes and intents, is reality, but objects which do not resist or modify our wills, we say are illusions. We say that the thing which we cannot resist is real. The meaning of this is that we call that real wherein the qualities of our sense organs are confirmed by the experiences of the other senses and, more especially, by the experiences of other selves. An individual who had been on a protracted spree, just as he was beginning to recover his rationality and was thus in the borderland of the experience of the carousal and that of his rational self, saw a monkey sitting on the foot of his bed. He was startled and reached under his pillow for his revolver. Lifting himself up, and while doing this and taking aim, he remarked to the monkey, "if you are a real monkey you are in a hell of a fix, and if you are not a real monkey then I am in a

hell of a fix." This individual was giving expression to the fundamental criticism of the real. He was not sure that his visual perception would be confirmed by his tactual, and there were no other persons present to make appeal to.

The scientific dualist who differs radically from the scientific materialist says, that what really exists independent of percipient minds is a world of mass particles having no secondary qualities. He conceives a world of no color, no taste, no smell, no temperature, no sound. It is this world that really and independently exists. It is a world of mass particles moving in space and time.

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CHAPTER XVIII

THE SCIENTIFIC NOTION OF MATERIAL SUBSTANCE

The scientific dualist, naive dualist, materialist, and idealist, all agree with the man of the street in that they unanimously admit the existence of the external world. When we perceive, they assert, *there is* something outside our own minds. A disagreement emerges, however, as to what this something *really is* and consequently as to how that external something is known, how it acts upon and is acted upon by the human mind.

The lecture desk before me is as I perceive it, urges the man in the street. Its existence is independent of me. We know, however, that the desk as I perceive it is in some fashion a function of many variables, to-wit: sense organs, nerve currents, my position, my interests, my attention, my previous experience and ideas. An African savage could not perceive this desk before me just as I perceive it. It would not *mean* "desk" to him. What we perceive is largely determined by our *already* achieved mental structure and outlook. In view of this, what is the factor that is independent of my perceiving? Many say that this object before me is a mere Schein, appearance, and that the *real substance* is something different *in genere* from its appearances. The scientific dualist maintains, as

against the materialist, that there are two kinds of being. The materialist says that there is only one kind of being, and that is matter. The attitude of the materialist is indicated by the old adage: What is mind? Answer: It is no matter. What is matter? Answer: Never mind.

The advocate of material substance admits that the qualities which we perceive in the external world are in part dependent on our organism. He admits that colors and other secondary qualities are phenomena. They are the joint resultants of external substance and of our percipient organism. What then is the nature of this independent substance or matter? In many of the older forms of the substance theory, it consists of mass particles in motion. It is an aggregate of minute bodies having mass, density, and varying in size and perhaps in shape. In terms of the distinction between primary and secondary qualities, the secondary qualities are subjective, they exist only where there is a percipient organism for which they exist. Body in itself consists of these minute particles in motion. In perceiving primary qualities, we have a copy of being as it is. Molecules in motion is thus the make-up of matter. Recently this Lockian notion has been greatly modified and we now have the more dynamic conception. In place of mass particles in motion, we now have the view that mass particles are but nodal points of energy. Matter therefore is the result of the action on our organs of centers of electrical charges. In the highly elastic, frictionless, imponderable ether are centers of strain, and these

strain centers are the electrons. This newer theory makes matter to consist of *non-matter in motion*. There are, however, many difficulties involved in this notion of the enormously strong ether, as well as in the assumption of an independent substance different in kind from what we perceive and yet assume to be the cause of what we perceive.

My criticisms of this theory are in part identical with Berkeley's. The first difficulty is as to how the advocate of an independent material substance is justified in his conception that, while secondary qualities have no correlates in matter itself, the primary qualities do represent properties that are inherent in matter. Locke and Descartes are in agreement on this point. The secondary qualities, they both say, are produced in us by the action of particles that actually possess the primary qualities. This is an assumption, and is for many purposes highly convenient. But this assumption is not thoroughly logical. Why not? No one ever perceived primary qualities without secondary qualities, neither did any one ever perceive secondary qualities unaccompanied by primary qualities. There is no such thing as one set of these qualities without the other. The disjunction seems forced upon us that either all the qualities are in the percipient organism or all are in the object.

The advocate of material substance says that primary qualities are in the object, for the reason that they do not vary as do the secondary qualities. The secondary qualities do vary and therefore are in me. But primary qualities are perceived by us

just as we do the secondary and the primary qualities do vary, although less markedly than the secondary. Either none of these qualities testify to independent substance or all of them do. The Lockian distinction is illogical. The advocate of material substance is not yet silenced. He will yet say, "I admit that, but there must be *something* external which exists, some cause independent of our wills and imagination. What is it?" This advocate of an independent substance insists that there is something independent of the mind.¹

Let us look at the most serious difficulty involved in this assumption of a material substance. Naively, we all assume and believe in an independent substance. We believe in it until we reflect a moment on the difficulties that are involved. But most of us after reflecting, forthwith go back on our reflection and still believe in an independent material substance. We are like the man spoken of by St. James in the Bible: "He is like unto a man beholding his natural face in a glass: for he beholdeth himself, and goeth his way, and straightway forgetteth what manner of man he was." We

¹ Practical and social motives are responsible for the distinction between primary and secondary qualities. The so-called primary qualities of bodies — space-occupancy, mass, inertia, motion — are the perceptual qualities which, being *relatively least variable*, human beings can *agree upon as being, for practical and social purposes, constant*. Moreover, since vision and touch are the two senses through which our active intercourse with the world is chiefly guided, the visual and tactual qualities which have most constancy are *convenient* substrates for all the other qualities.

assume that the world as we perceive it is a part of reality. But the variability of our perceptions ceaselessly operates against this. Two men in the same field do not see identically the same field. Two men before a great mountain do not perceive identically the same mountain.

We are told that what really exists is a material substance, but on analysis this material substance is not the common world of our experience; it is a substitute for it. It is something which by hypothesis can never be directly experienced. What then is the relation of this world of supposed substance to our common world? Here we get no cogent answer. John Locke says that our knowledge is a sort of copy of the external world. The huge assumption made here Locke never was conscious of. How do I know that my knowledge is a copy? A copy is a copy of an original. How do we know that our knowledge is a copy? If by hypothesis we never could know the independent material substance, then how could we ever tell that our knowledge is a copy of the material substance? This is the greatest difficulty with this standpoint. By what transcendental sense could these men perceive the original?

The Matter about which physicists theorize is a hypothetical something, a construction, a theory. Descartes saw clearly this difficulty, but he never succeeded in making much out of it. He was doubtful as to whether there is any external world at all. He says that it is possible that all of our perceptions are illusions. To guarantee the validity of our per-

ceptions, he called in the veracity of God. If God exists, He is veracious—He won't deceive us and therefore there is the external world. Sad indeed is the situation of a philosopher who introduces the God idea as an epistemological device to guarantee our perceptions!

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CHAPTER XIX

MATERIALISM

The scientific dualist, who assumes the existence of a matter different from the experienced world, has thus far not given us a clear and consistent conception as to what this matter is, nor can he give a plausible explanation of how it acts on mind and is acted on by mind. In actual experience we have sense qualities and mind interdependent. *Materialism* holds that *matter only* really exists and that mind is but an epiphenomenon, a by-product of matter. Like a tramp "bumming" his way on a train, it is not a real factor in the process of experience. The materialist argues that matter is the only reality. There is only movement of mass particles in space. This view is expressed by the saying that brain secretes thought as liver does bile and the expression "der Mensch ist was er isst".

The arguments given by the materialist are these:

a) He adduces obvious evidences of the dependence of consciousness on physical conditions such as: If the supply of blood to the brain stops, unconsciousness ensues; when in great fatigue, it is difficult to think; a blow on the head will produce unconsciousness; drugs and diseases have various effects in the way of heightening and lowering consciousness.

b) The materialist re-enforces his first argument by pointing to the development of consciousness in the biological series. He regards consciousness as an agency which is dependent on the degree of development of the nervous system. There *seems* to be a one-one correspondence or co-relation between the vividness and apparent efficiency of consciousness and the organization or complexity of the nervous system. Man has the most complicated brain of all animals. The more organized the nervous system, the more organization of brain structure, the higher the degree of consciousness and intelligence. Mind, therefore, is simply a function of the nervous system, says the materialist. Consciousness is not an entity or an agent, it is only an attribute of the nervous system.

Let us examine these arguments. Both imply that consciousness is the effect of purely physical causes. What do we mean by saying that one set of conditions is cause of another set? In the sciences, by cause is meant an invariable and unconditional sequence; what always follows is the effect and what always precedes is cause. This is the scientific notion of cause, save where the more rigid notion of quantitative equivalence is used. In so far as cause is identified with the idea of quantitative equivalence, the causal idea loses its significance in application to the relation of brain and consciousness. From the viewpoint that cause is invariable sequence, the materialist's argument is one-sided. It is true we do observe mind changes following upon bodily processes, but the converse is equally true,

and it is on this converse that the strength of dualism reposes. In his first argument the materialist ignores one side altogether. His second argument is much more important. There is a correlation between the degree of the organization of the nervous system and the degree of consciousness and intelligence. We cannot with our present technique carry this out in a detailed way, but we must admit that the functioning of mind in this two-sided world of ours is dependent on a nervous system. Minds do not work without nervous systems, but we must not forget that, though the nervous system may be a causal condition, it need not be the *total explanation* of the operation of mind. The functioning of the nervous system may be an invariable condition of the functioning of consciousness, but we cannot explain mind entirely in terms of this one causal condition.

On the materialist's hypothesis, mind is useless, it doesn't do anything, it is an otiose by-product, it is wholly passive. In the organism, bile does something physiologically, and we can analyze it. But thought escapes all analysis by physical means. The analogy between thought and glandular secretions is worthless and misleading.

As a matter of fact, animals with the greatest degree of consciousness are those which dominate creation. "Beware when a thinker is let loose on this planet", said Emerson. Pictures, poems, tools, states, religion,—these are the products of thought. It is not in accordance with plain facts to say that conscious intelligence does not do anything. Con-

sciousness is efficacious both for good and for evil. In the present world war, we see clearly this bi-focal type of mental efficacy.

The scientific minded materialist appeals to the doctrine of the conservation of energy as his last resort, and he assumes that this supports his theory. As we have stated above, this is only a working hypothesis and we do not take this as our *sole* guiding principle. But even if we do take the materialistic viewpoint, we yet have something outside the range of measurement. If we take the principle of the conservation of energy as the absolute truth, we can see no reason why there should be such a thing as mind appearing in the series of organic forms. Either mind is an efficient agent and in that case the conservation of energy is not an absolute principle, or mind is without any efficacy and in that case the mass particles moving in space do not seem to behave in accordance with nature's principle of parsimony, since they generate a superfluous and useless illusion, i. e., conscious intelligence.

Finally, it will be clear that the materialist is unable to explain *how* mind can be a product of matter. Furthermore, it will be evident that the scientific conception of matter is itself a product of mind. The matter the scientist deals with is a conceptual construction and not anything that any one can ever experience. But how remote is this conception from that of the ordinary man? The ordinary man means by matter the organized qualities that we perceive. These, we have seen, in part

depend upon our perceiving. What we experience are *grouped sense qualities*. Our world of experience is, therefore, a realm in which the percipient organism and the object mutually imply one another, and the world beyond what we perceive is only the real possibility of further experience.

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CHAPTER XX

SPIRITUALISM OR IDEALISM

The basic thesis of this standpoint is that only minds and their contents exist. To my mind there are three chief forms of Idealism, viz.:

1. Berkeleyan
2. Leibnitzian
3. Hegelian

1. BERKELEYAN IDEALISM

The essence of the first is this: Berkeley argues that our knowledge consists of *notions* and *ideas* or perceptions. By notion he seems to mean immediate awareness or intuition. I know myself directly as an active being, thinking, perceiving, and willing. In addition to this immediate awareness of activity, I also have ideas. I have content with respect to ideas. I am passive or receptive in having ideas. These two exhaust the whole field of knowledge. When I perceive any object such as desk, tree, snow, I have a congeries of sense *quales* and these congeries I call things. By things Berkeley means just what I perceive.

The field of knowledge involves notions and ideas. Notion is a knowledge of the spirit as an acting subject. In perception we know that we are relatively passive. Our perceptions are received by us; they must, therefore, have a cause which is independent of ourselves. We are continually dis-

tinguishing between those images that are, and those that are not, under our control. We know that we do not cause our perceptions. I cannot help seeing, feeling, hearing, the content of my present field of perception. There is involved in perception a degree of constancy and a type of order which attests the independent character of the cause of our perceptions.

What causes our perceptions? We have seen that the materialist argues that the cause is matter, a principle which is entirely different from our perceptions. The materialist argues that matter has the primary qualities but is eviscerated of all secondary qualities. This distinction, says Berkeley, is illogical. If primary qualities are objective, so also are the secondary. Berkeley convincingly and irrefutably shows that all qualities are on the same footing. The ordinary assumption of the materialist is that ideas are *copies* in our mind of the independent matter. Now Berkeley asks, if we cannot perceive matter, how can we experience matter? And if we can perceive matter, then matter is the content of the act of perception. We cannot know the relation between ideas and matter if we do not perceive matter. Berkeley says that the material is only perception. Must there be an objective cause? We have no knowledge of matter as a cause. We do know, however, that we are causes. We are conscious of producing changes in the world, therefore the cause of our perceptions must be a spirit. As our perceptions show order, regularity, and an intelligible structure, so the cause of our

perceptions must be the incessant operation of a spirit which has such an intelligible character.

Mind I know intuitively — by a notion — as a thinking, acting principle. I thus know mind as the spiritual support of ideas. There is, therefore, no independent *material substance* for Berkeley. Nature is literally the living garment of the Deity. The world of nature, “the whole choir of heaven and furniture of earth”, is a divine, visual language. Just as I infer from your looks that you are intelligent, so I infer that an infinite, omnipresent, intelligent principle is speaking to me through nature. Nature is not a garment that hides the Deity, nor is nature a body of thought forms which hide reality from the percipient individual. Nature is the direct revelation of God’s intelligent and benevolent will.

I do not perceive my fellowman’s spirit directly, but I do infer from his actions that there is a spirit. So I infer from the order, utility and beauty of nature that there is a Supreme Spirit. There is also this important difference between our perceptions of nature and those of individuals. Nature we have constantly before us as a manifestation of the power and intelligence of the Supreme Spirit, whereas human individuals do not bear this constant relation to us. Since nature therefore is a language to man, all he has to do is to study it and it speaks. Berkeley would say that the whole technique, both mathematical and experimental, of modern science are but elements in the process of learning nature’s tongue. Do we eat and drink ideas when we eat and drink sense objects? Yes. But it is, however,

only a question of names at this point. Berkeley insists that his view is the common man's view. The materialist says that what you perceive is not matter. Back of what you perceive, says Berkeley, the materialist postulates some thoughtless, stupid thing. It is the futility of this postulate that Berkeley is seeking to show. He has seen that such a postulate will not explain the facts of perception. When Dr. Johnson kicked the stone and it hurt, he did not refute Berkeley. It is the materialist who deprives our sense impressions of their reality. "Esse est percipi", this famous expression, which has often been taken to be the whole of Berkeley's system, is in reality only its beginning. The divine mind is the cause of our perceptions and it is the cause of the continued existence of things when I do not perceive them. Mind is the only conceivable cause of our ideas and perceptions. God is the universal intelligence which we conceive on the analogy of our own existence as thinking, willing selves.

There are certain fundamental difficulties in Berkeley. Nature for him is simply the effect in human minds of the continuous activity of the divine mind. From this standpoint, what becomes of the past history of nature, of the genesis of the solar system; in short, what becomes of the whole world before man appeared? Nature is simply a continuous manifestation of the divine mind to finite minds, on Berkeley's premises. This continuous manifestation of the divine is all there is to nature. At this point we see, therefore, that Berkeley deprives nature of any existence on its

own account. This is one of the two chief difficulties in his system. His doctrine is also unsatisfactory in the solution it offers of the relations of one finite mind to another and to God. Your body from your point of view is the effect of the divine will acting upon your mind. But your body as I perceive it is the effect of the action of the divine will on my mind. Here arises a serious difficulty. How can I distinguish between my body as I perceive it and my body as you perceive it? This question is not satisfactorily answered in Berkeleyan idealism. As James has shown, my appreciation of my own body has a peculiar *warmth* and *intimacy* which I never experience in connection with my perceptions of your body. Never do I perceive your toothache quite as I do my own. Never do I perceive your difficulties as I do my own. Why feel in such an intimate way the action of the divine mind which I call my body, if the whole world is perceptual content? Why is there not the same emotional tang to all my experiences? If body is what I perceive and only that, then Berkeley's theory fails to account for this patent fact.

In conclusion we may say that Berkeley's theory does not give us a satisfactory doctrine of nature, nor does it account for the uniqueness and the discreteness of selves.

2. LEIBNITZ'S MONADOLGY

Leibnitz's doctrine avoids one of Berkeley's difficulties. Leibnitz starts from the idea of substance. He is thus in agreement with the other chief

thinkers of the time in making substance the central explanatory principle. He sets up a plurality of *monads*. Now a monad is a center of force or of desire and activity. We may almost say that a monad is an animated point. In this respect Leibnitz shows profoundly the influence of the mathematics of his day. Galileo, in describing the path of moving bodies, called the differential a point of tendency and at no time in the physical series does Galileo resort to rest, as did Archimedes, as the final point of explanation. So here Leibnitz comes not to a position of equilibrium or rest, but to force. The whole universe consists of an infinite number of centers of desire or striving. There are three kinds of monads, viz.: —

1. Body monad (animated molecule)
2. Soul monad (monad having memory or conscious continuity)
3. Spirit monad (a center that sets up ends).

All physical bodies are made up of monads. These centers of force and feeling exhaust the whole content of the world.

The monad develops from within. The history of the monad is a consequence of inner impulsion and not of external impact. Here also we find employed the conception that Galileo, Huyghens and other physicists of the time worked out, of the nature of a point of any function as expressed by the differential.

Every monad is in some degree a soul or self. Even the body monads are rudimentary selves, that

is, they are low grade centers of feeling or desire. Each monad mirrors or reflects the universe, and its development is entirely from its own internal impulse. It is self-active. The monad produces no change in any other one. Each develops solely by the law of its own being. In this aspect, Leibnitz expresses the central core of the mathematics of his day. The monad, in addition to being a point expressing the law of an entire series, is also a complex unity. It is the true type of that which is both one and many, both unity and complexity. The best analogy of such a function Leibnitz finds in the self or soul. A human individual is complex; it includes a variety of impulses in a unity of feeling and purposive activity.

In the body monad there are only dazed flashes of consciousness and from the lowest body monad there begins an infinite gradation of organization. There are no breaks in nature; and so we have an infinite series from the very lowest up to the most rational and self-conscious monad. This may be pictured as an ascending scale which leads up to the perfect monad, namely, God. God is the one perfectly organized monad. He is the governing monad, and is also the cause of the existence of all the others.

In conceiving of the relation of body and soul, Leibnitz does not think that one term of the dualism sends over any influence into the other term. Both members of the dualism work together in harmony. There is in Leibnitz's view no dead matter which serves in Lockian fashion as the unknown cause of

our perceptions. On this point Leibnitz is in fundamental agreement with Aristotle. Soul is the entelechy of the body.

Leibnitz has propounded an original conception in psychology, to-wit, the conception of grades of consciousness. There are all sorts of modes ranging from the most transient and evanescent feelings up to clear self-consciousness. The inner life of the monad is made up of "perceptions petites". In the very lowest type of monads there are but few of these minute perceptions and the unifying principle is least operative. Since Leibnitz conceives all force as being in the final analysis psychical, the physical spatial order is but the phenomenal expression of an infinite number of interrelated monads. Force is of the nature of a self-acting and desiring type. I am a body governed by soul. I perceive most clearly those monads which are nearest to me in kind, and I also perceive their interrelationships under the form of space. The world is a harmonious system of such monads, and these monads are not *in space*, but space is *in them*. The same relation is also true of time. The laws of mechanics are true, but they are not the ultimate truth. The Newtonian principles express the order and continuity between spatial phenomena. From the spatial point of view, the world is through and through mechanical, but this mechanical system is the expression of an inner purposive, teleological nature. The monads constitute a kingdom of spirits, a cosmical harmony of souls. In this way Leibnitz has incorporated into a single principle the teleology

of Plato and Aristotle, and the mechanics of Newton, Kepler, Galileo, Huyghens, et al.

Spiritualism or idealism in Leibnitz thus assumes a form which does not deprive nature of reality—nature is real. Nature is really alive, is psychical, and in this respect the Leibnitzian conception of nature is in perfect harmony with the nature-romanticism of Wordsworth, Byron, Shelley, and others. In nature there is an all-pervasive spirit akin to ours. Leibnitz is also in harmony with the most recent deliverances of physical science; for both nature is dynamical, is process, activity.

This view of Leibnitz is the most original metaphysical conception of modern times.

This type of spiritualism does not really account for the fact that the world of our experience has two aspects. This view may be true, but it fails to convince us that the whole of nature is alive and psychical. It does not tell why there should be this double aspect to experience and why, if physical nature really consists of souls, we commonly fail to be conscious of their presence and are usually incapable of communing with them. Royce, our late notable American idealist and also Liebmann,* have tried to rectify this one defect. Royce says that the reason why we do not apprehend the psychical life of nature is because the souls distributed throughout nature have different time spans. Our own consciousness has a certain beat,

* In *Zur Analysis der Wirklichkeit*.

so to speak; attention wavers and wanes at a fairly constant rate. Our consciousness has a certain rhythm. If we had a more rapid rhythm of consciousness, we might live in a minute as much as we now live in a hundred years. As compared with the elephant and lower forms of animal organism, and still more so with inorganic nature, our consciousness has a much more rapid rhythm. Now if we had different rhythms of consciousness, we could perhaps hold communion with stars, mountains, trees, yes, even with stones. Our failure to apprehend the all-pervading psychical life in nature is thus, according to Royce, due to the differences in time-span between their lives and ours.

This seems unlikely to me. If all parts of nature have an indwelling consciousness, then our scientific formulae for the regular behavior of objects should be reducible to a common type, and all the different sciences could be shown to be only parts of one science, namely, psychology. Not only logic and ethics but physics and chemistry would be merged into psychology. As science develops, we discover that the rules of the behavior of stones, rivers and clouds are not the same as the rules of the behavior of psychical beings. And, among psychical beings, those with the most highly organized individuality have the most unique and significant ways of behaving. Moreover, we also discover that the difference is not reducible to variations in the time-span. It is a difference in kind. There is a constancy, a regularity that differs in kind in these different levels—namely, the physical,

the animal and the rational—and I fancy that the time is not even relatively at hand when the only technique of the social engineer will be a book of log tables and other mathematical formulae. I see no promise of the reduction of the psychical and the physical to a common basis.

3. HEGELIAN IDEALISM

The great names here are Fichte, Hegel, T. H. Green, E. Caird, Bradley, Bosanquet, and Royce. This type of idealism is called objective. Berkeley's is designated subjective. For both Berkeley and Leibnitz, there are only subjects. Leibnitz differs from Berkeley in that he includes the whole of nature, which he conceives to be constituted by a plurality of subjects. We saw above that for Leibnitz nature is not, as it is to Berkeley, the mere expression of God to human mind.

Hegelianism makes no attempt to reduce nature to an assemblage of finite souls. It admits unequivocally that nature is unconscious and has ways of behaving that are qualitatively different from our human modes. But Hegel further holds that nature is not independent of experience. Indeed reality is experience, and being experience it is therefore process. But it is not a simple, homogeneous texture of experience. It is process containing oppositions and conflicts. From this standpoint the physical stands in opposition to the mental. It is the *Other*, it is the opposite of mind. Fichte's view is that nature exists only as an *Anstoss*, as a stimulus for the creation of free moral agents.

Nature is that apparent other-than-mind in interaction with which mind becomes conscious. It is only in conflict with, and in the overcoming of, the physical, that we achieve our full nature as conscious and rational spirits. The idealist of this type conceives the whole universe as a purposive system and shows the development of the conscious realization of purposes to be the process of organization of fuller spiritual individuality. This realization takes place through the overcoming (*aufheben*) of opposition. There is an insistence here that nature is an organic totality in which mind comes to full realization. The meaning of nature is spiritual. If we wish to get the best key to the meaning of the whole, we should look at the highest development of the spirit (*Geist*). This view aims to justly regard all the aspects of experience, and it does this by showing that the stages of inorganic nature are epochs preliminary to the development of minds into higher forms of spiritual totality and harmony. Let us never forget the inorganic and the animal rock from which we are hewn, and let us also guard against the assumption that we are caused by this. The Hegelian standpoint is that the principle of totality, of the organization of the whole, is spirit, which helps itself by subduing matter, its opposite or other. Moreover, Hegel insists that, as we reflect upon this infinite organization, we must be just to all its aspects. Reality is the concrete and all-inclusive spiritual world-process which includes and assimilates into itself, as subordinate

moments contributory to the spirituality of the whole, the inorganic and organic orders.

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CHAPTER XXI

THE IDENTITY OR DOUBLE ASPECT THEORY

The identity or double aspect theory of the relation of soul or mind and body in man and in the universe was first formulated by Spinoza. It has since been advanced, with various modifications, by Schelling, Fechner, Paulsen, Herbert Spencer, Heymans and others. Fechner, Paulsen, Strong and others give it a spiritualistic twist and Haeckel gives it a materialistic twist. It has found favor with many psychologists. Reality consists of two irreducible aspects. They do not interact; they are the two aspects of one principle or substance. "*Ordo idearum idem est ordo rerum*". The order of ideas is the same as the order of things, i. e., Spinoza means to say that the mental and physiological processes are parallel. This psycho-physical parallelism rests on the assumption that the degree of mental organization and perfection corresponds to the degree of bodily organization and perfection, but the one does not cause the other. This standpoint, starting as a metaphysical interpretation of the relation of soul and body in man, is generalized into a theory of the relation of mind and matter in the universe at large. It thus passes from a psychological doctrine into a cosmology. Reality is two-faced. This view, if taken literally, would lead us back to the pan-psychism of Leibnitz and to the

extravagances of Fechner and others like him who have busied themselves with a suppositious region of plant psychology. One who thinks clearly, and follows it through, cannot stay in this double aspect view. There is an inevitable tendency to emphasize the one or the other term of the parallelism, to shade off from a monism with two forces into either spiritualism or materialism. Nevertheless, as regards the relation of body and soul there is an element of truth in this view. Mental and neural processes do exhibit a considerable degree of parallelism and can be thus fruitfully regarded. But the mental self is not literally parallel with the nervous system, notwithstanding the fact that it operates in the closest connection with the nervous system.

SUMMARY

Reality is experience (actual and possible). It is an organized whole having many degrees of individuality. So far I go with Leibnitz. The whole world is a dynamic process, but the physical world is not psychical in itself. Selves are true parts of the world. The physical order is the sub-structure of the social order. There is therefore nothing real which is not subject or object of either actual or possible experience. Furthermore, experience is social. What we mean by the physical is that which is accessible to all selves. Of the individual self we can have no adequate conception apart from society. The individual lives and develops only as a member of a social order. Now the physical is the real, common ground of our social activities. But the social

THE IDENTITY OR DOUBLE ASPECT THEORY 193

and spiritual is also a true part of the real. The physical is intelligible and is to some extent subject to human control. And because of this we may say it is a part of a teleological system, but it is not a figment of the Ego's imagination, as Fichte came perilously near saying. Nor is nature the mere subservient tool of purpose interpreted in a narrowly humanistic or supernaturalistic fashion, as was done by older naive and pre-evolutionary teleologists in their watchmaker theories of design. (Of this matter more anon.)

In the real world of actual and really possible experience, which is the only world that has concrete meaning for human beings, selves-in-societal-relations and physical nature are in organic or functional interdependence. They are co-ordinates and therefore functions one of another. Reality contains non-mental individuated centres of force or dynamic relationship, vitally organized and psychological individuals of various grades of wealth of content, degree of organization and harmony. All these various types of individual or monads live and function in what, for want of a better term, I call "organic or functional" interrelation and interexistence. The highest type of individuum that we know is a rational human individual or personality. In human individuality the functioning of mind is conditional upon the functioning of a central nervous system, but, as I have already argued, we are not compelled, since we have not sufficient grounds for the assumption, to say that mind and nervous system are absolutely identical. An individual mind

is a conscious, active and selective centre of meanings and values expressing itself through, and therefore conditioned by, a physiological organization. The mind is the dynamic meaning and purpose of the body. The relation between them is not properly described as "causal". It is the functional interdependence of two systems which, together, constitute a teleological whole and in which body is the teleological instrument of mind.

Such, with reference to the soul-body and mind-matter problems, is the standpoint which may be called "organic experientialism" or "teleological idealism".

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CHAPTER XXII

SINGULARISM AND PLURALISM*

(THE ONE AND THE MANY)

1. FROM NAIVE PLURALISM TO SINGULARISM

When we say cosmos, universe, or world, we imply that all things which exist and all events which occur are interconnected. There is a unity of some sort and perhaps there are unities of many sorts. Yet this statement involves the recognition, not alone of the interconnection of things and events, but also of their manyness. There are many beings; there is a constant procession of events. What then is the relation of the manyness of things and the unity of the whole? What constitutes the togetherness of things? What kind or kinds of unity are there to be found? Does the universe in the last analysis consist of an aggregate or collection of discrete or discontinuous beings? Or, is the universe fundamentally a sort of block universe, all of a piece?

The Pluralist argues that the universe consists of a number of discrete beings, i. e., that the universe is made up of beings which, with respect to their existence, are discrete and separate. The

* Singularism is frequently called "numerical monism"; inasmuch as "monism" has another widely employed meaning I prefer the terms singularism or unitarism.

Singularist holds that there is only one real being. This *one* is the all-inclusive unity. "The one remains; the many change and pass. Life, like a dome of many colored glass, stains the white radiance of eternity." (Shelley.)

This seems to be a very abstruse problem, and so it is. It seems, to the beginner in philosophy, very abstract and remote from life, but such is not the case. This problem bobs up everywhere when we come to think out the fundamental problems of science and social organization. Let me illustrate. The common conception of physical science is that matter is made up of indivisible units. The nature of these units is now regarded as made up of electrons, this being an improvement upon the old atomic conception. Now, whether it be the old atoms or the new electrons, in either case the assumption of the physicist is that the world is built up out of unchangeable elements. In biology also we find the same shifting from one unit to another as ultimate, but we also find here the assumption of something that is an irreducible element. When you have your unit, the question arises as to how these units are to be related. The physicist sees that a lot of entirely separate units will not constitute a cosmos, universe, or world. There must be something further which will account for the unity or interconnection of things, and it is to satisfy this fundamental motive that the physicist postulates the ether as the continuum. The elements must have something to connect them. There must be some sort of ground for interaction. This same

situation is evidenced in the life of the state. Does the state consist of entirely separate individuals? This was the old "Laissez faire" doctrine, and even to us this assumption sounds good until there emerges a conflict between the individual's aim and that of the general good. We have here the same duality of unity and manyness. At the present time many a pacifist says: "I have no interests in the quarrels of Europe. I would rather be a live pacifist than a dead hero." What do we do with such a man as this? We either put him on the firing line, or in some way force him to acknowledge the binding nature of the general good incorporated in the institutions and aims of the state. Extreme individualism leads to the total disintegration of society. Such individualism will not work. We have to learn that the state does not exist merely to feed us, to clothe us, and educate us, and in turn to ask nothing from us. The working theory of the Germans is that the state is divine, and that the individual should be completely absorbed in the state. In this Germanic theory we have an extreme application of the singularistic view of the state. Pluralism, on the other hand, in its emphasis on the value of the nature of the individual, when it becomes extreme, develops into anarchism. It does not seem to have the element of togetherness which is indispensable to the formation and maintenance of the state as the necessary basis of social order.

How can we conceive rightly the relation of the particular constituents and the unity? This problem, as I am discussing it under the general

title of the One and the Many, is but a generalization of the same problem in chemistry, physics, ethics, philosophy of the state, and in all the other sciences. In religion our question is, what is the relation between God and man? Is God the all-inclusive being in whom literally we all live, move and have our being? And do we exist only as parts of God? To this question Pantheism replies in the affirmative. All finite selves are only parts of the single being. Pantheism denies that we have separate or semi-independent existence. The only being that has reality is *natura naturans*. This being the case, all reality is denied to *natura naturata*, or *ens causatum*. The question emerges, are we separate, free, responsible beings? The answer of Spinoza and of all the thoroughgoing singularists or monists is "no!" Thus, the same problem appears in connection with the human will. Have we the power of self-determination? Can we in any way determine the courses of our actions and volitions?

Moral freedom need not mean caprice. It means, however, that to some degree I determine my own destiny, that in some small way, I am the captain of my own ship. However, if I am to make a good voyage, there are certain conditions which I must acknowledge and obey. But moral freedom means that these given conditions are not the whole of the moral life. I am my own steersman. Necessitarianism says that man is like a pawn on a chessboard, or like a mote in the sunbeam; that his life is completely and inevitably determined by forces of which he is only the geometrical meeting

point. Here again appears that fundamental contrast between the view of the Singularist and that of the Pluralist. But freedom seems to be inconsistent with Singularism.

Let us consider briefly the motives which lead from Pluralism to Singularism. The naive standpoint is pluralistic. This standpoint is natural to man. To us all the world appears as an aggregate or collection of many distinct beings. The primitive world view, as we have already seen, is through and through pluralistic. But the development of thought and the organization of society involve an increasing recognition of order and law in both natural and social phenomena. The growth of organization or order in social life tends always to be reflected in our interpretation of physical nature. The great French movement in social psychology of the last generation, carried on by such men as Le'vy Brühl, Ribot and others, has made its contribution at this very point. At first natural phenomena appeared to be capricious and wholly independent of any principle of organization. But as social and technical control increased, man found a conception of law and order in nature. It is at such a point, where man has become conscious of the existence of some unifying principle in nature, that we find the early Greek philosophers. These men are singularists. Thales and the others felt that all finite forms of existence were modifications of the one all-inclusive substance. The wonderful suggestiveness of the Greek movement resides in the great diversity of

types of unity which they suggested. They all agree in the assertion of the existence of unity.

Religion has also moved from Pluralism to Singularism. In its earliest stages it is generally a chaotic polytheism, and moves on until it becomes monotheistic. The highest form of monotheism is given us in such prophets as Isaiah. Such expressions as the following evidence this: "I am Jehovah; I form the light and make darkness; I make peace and create evil; there is none other beside me". Isaiah is in agreement with the early Greek philosophers. There is only one ultimate being.

Let us consider certain aspects in which the universe is one. Take, for instance, the perceptual order. In this order space is an absolute continuum. It is impossible for us to imagine that there is no space between any two solar systems. We cannot think that space is bounded. There are no utmost bounds to space. Neither can we conceive space to be so divided that there is no space between the parts. Mathematics has at last succeeded in defining linear and other continua in such a way as to make perfectly clear the meaning of our inability so to conceive space. And, in the modern mathematical conception of the nature of the infinite, we have traveled a long way from the notions which regarded the infinite as the merely unlimited and also have traveled far from the Hamiltonian conception of the infinite as the mere negation of the finite. Space is not the only continuum. Time also appears to be a continuum. We cannot think of two successive events between which there is not

time. It is quite true that experiential time comes for us, as James puts it, in drops, but the reason for this is the rhythmic character of our attention. Time does not so appear to us when we *think* time. We can only think time as continuous. In addition to space and time, we find a causal principle of unity. The causal postulate means that if the same antecedents occur, the same kinds of consequents or effects will follow. Causation appears to be a form of unity or order which is as fundamental as either space or time. We hold that there is a connection between the moving of the string on yonder window curtain and the planet Mars. We are told by the physicist that the fall of the minutest particle causes a tremor throughout the solar system. Tennyson has this form of unity in mind when he says:

"Flower in the crannied wall,
I pluck you out of the crannies,
Hold you here, root and all, in my hand.
Little flower — but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

So the motives making for singularism are strong in all directions—in science, art, politics, and religion. The Singularist position has appealed to the speculative poets. Indeed, this attitude is an expression of the deepest motives of philosophical reflection. Philosophy is just this deep passion for the vision of the whole. The philosopher is convinced that this world of ours is not a junk-shop

world or a rummage-sale universe. In some way or other this universe is really one orderly whole. Tennyson expresses this unity of the universe in his poem, "The Higher Pantheism";

"The Sun, the Moon, the Stars, the Sea, the Hills and the Plains —

Are not these, O Soul, the vision of Him who reigns?
Is not the vision He? Tho' He be not that which He seems?
Dreams are true while they last, and do we not live in dreams?

Earth, these solid stars, this weight of body and limb,
Are they not sign and symbol of thy division from him?

Glory about thee, without thee; and thou fulfillest thy doom,
Making Him broken gleams, and a stifled splendor and gloom.

Speak to Him thou for He hears, and Spirit with Spirit
can meet —

Closer is He than breathing, and nearer than hands and feet."

Wordsworth in his "Lines composed a few miles above Tintern Abbey" thus voices his sense of a Universal Presence:

"And I have felt
A presence that disturbs me with the joy
Of elevated thoughts: a sense sublime
Of something far more deeply interfused,
Whose dwelling is the light of setting suns
And the round ocean and the living air,
And the blue sky, and in the mind of man,
A motion and a spirit, that impels
All thinking things, all objects of all thoughts,
And rolls through all things."

The doctrine of the Universal Soul or Self, which includes and sustains all things finite and mortal as the being of their beings and life of their lives; the Absolute and Eternal Spirit who is the undying and unchanging reality behind the illusory appearances of the many finite selves, is the most characteristic teaching of the Ancient Hindu religious-philosophical literature — the Upanishads. This doctrine, one of the classical forms of absolute singularism or numerical monism, is beautifully expressed in Emerson's little poem, "Brahma":

"If the red slayer think he slays,
Or if the slain think he is slain,
They know not well the subtle ways
I keep, and pass, and turn again.

"Far or forgot to me is near;
Shadow and sunlight are the same;
The vanish'd gods to me appear;
And one to me are shame and fame.

"They reckon ill who leave me out;
When me they fly, I am the wings;
I am the doubter and the doubt,
And I the hymn the Brahmin sings."

The reader who will ponder well this little gem will find that it contains the gist of many pages of philosophical argumentation and explication. Spinoza's *Ethics* is an elaboration of the same motif; Hegel's whole system is a subtle and labored endeavor to apply and deepen the meaning of the same fundamental intuition which consists in "seeing all things in God" (the latter expression is from

Malebranche, a disciple of Descartes) ; Bradley and Royce essay, with somewhat different emphasis, the task of establishing the truth of the same insight in the light of modern logic and psychology.

What chiefly distinguishes our modern European philosopher-panteists from their congeners of ancient India is the constant endeavor of the Europeans to find place and significance and value in the Eternal One for the various degrees of psychical and spiritual individuality and for the labors, sufferings and achievements of the historical life of humanity. Among them Hegel has made the bravest attempt of all; and Royce, with his reiterated emphasis on the volitional and purposive character of reality and his stressing of the significance, in and for the Eternal Individual, of the strivings, deeds and emotions of the human self and the social order, finally developed, in his doctrine of God as the Spirit of the Beloved Community, a standpoint which is fundamentally inconsistent with eternalistic singularism. The course of modern speculation on this theme suggests the question whether the eternalistic singularists have not attempted an impossible task. Does not the initial assumption, that the temporal order, the entire realm of change, evolution, culture-history and individual development, is mere appearance of a timeless order, condemn philosophy and the reflective life to a denial of the meaningful reality of experience and human life and send philosophy on a flight into the inane from which, logically, it has no way

of return and no means of finding a positive valuation for human life and experience?

There are two types of philosophical Singularism. First, is the Singularism of substance: Spinoza's doctrine. This is the view that there is one all-inclusive being, the Absolute or one Substance. True human freedom depends on our recognizing the illusory nature of our ordinary beliefs as to the separate or independent existence of finite being. True insight consists in understanding that we are nothing apart from God. Our true being consists in our membership in him. We are in the One. Substance is that which exists in itself and by itself, and the philosopher is the one who sees all things under the form of eternity. And in so far as we achieve genuine freedom, we live under the vision of things, *sub specie aeternitatis*. Bondage and error is the lot of all who are outside of this vision. We are all parts of the one substance, but these parts are not, however, of the same glory. There are degrees of reality in finite beings. The second or Hegelian doctrine is that the absolute is the one all-inclusive *Spirit* or *Individual*.

2. THE SPINOZISTIC CONCEPTION OF THE ABSOLUTE

The true or adequate view of reality, for Spinoza, consists in seeing things *sub quadam specie aeternitatis*, that is, in seeing all that is finite and temporal as the necessary expression of the infinite and eternal. This view Spinoza calls intuitive knowledge. The essence of every finite being is the striving to express its own being, but the true being

of man consists in seeing himself as part of the One. In this way all evil and good vanishes. Evil and good are functions of our failure to consider things *sub specie aeternitatis*. Immortality is not a duration of our lives through endless time; the living in it is this vision of all things as seen in the light of eternal truth—of the Absolute. Passions and emotions belong to us as finite, but the idea of God enables us to detect and distinguish the higher from the lower elements in them. By this vision the negative elements of our experience are eliminated and this elimination is necessary for the bringing about of true and adequate ideas. True freedom consists *intellectually* in seeing ourselves and all things as necessary elements in the perfection of God. True freedom consists *emotionally* in what Spinoza calls *amor intellectualis dei*. This intellectual love of God is the very love wherewith God loves himself, not in so far as he is infinite, but in so far as he can be expressed by the essence of the human mind considered under the form of eternity, i. e., the mind's intellectual love of God is part of the infinite love wherewith God loves himself. (Ethics V, 36.) The finite, human self, with all its positive individuality disappears in an abstraction, and in this way Spinoza reproduces the principle of asceticism while rejecting it. So far as our life is penetrated and controlled by this insight of seeing all things in God, we have actually become God. It is only by means of this insight that man can actually partake in God's liberty. In so far as man is finite, he cannot achieve the liberty of God. In

so far as man is finite, he is wholly determined by antecedents, and in so far as man is raised to the infinite, his individuality seems to vanish. All finite things as finite, are modes or modifications of this one infinite substance. Finite being is like a ripple on the surface of the ocean of being. This analogy, however, is defective for the reason that the finite self can become a conscious part of God.

How does Spinoza reach this conception of the One, the absolute Substance, God? He starts out as a rationalistic mystic in a way that reminds us of the Stoic and of the Neo-Platonist. He really sets out from an intuition. A pantheist is one who identifies God and the world. Now there are two types of pantheists. Spinoza is not a crude pantheist, i. e., he does not regard God as the soul of the world. God is for Spinoza, not the soul of the world, but the only being that really is. God is the all-in-all, the all-one. Everything depends upon him and is determined necessarily so to follow from the divine nature. Things as such have no existence. The world of finite selves and other beings, for Spinoza, has no existence on its own account. It is only a manifestation of God seen from a finite point of view. God is *the only reality*. God is the *one* substance. Spinoza may well be called an acosmist or an acosmic pantheist, in that he denies to the world any independent reality except as a manifestation of God to the finite. It is no wonder that Novalis referred to him as the God-intoxicated man.

In his method Spinoza is deductive and geometrical. He starts out, not with concrete fact, but with his a priori definition of substance. The definition which he gives of substance is somewhat as follows: "That which exists *in se* and is conceived *per se*; i. e., which, in order to be conceived, does not need a prior conception of anything else". In other words substance for Spinoza is *ens in se*. Substance is both self-conceived and self-existent. Its very essence involves its existence. Substance is the self-existent being, and in this way the universe is truly one. There is nothing outside of God to either hinder or influence him. The human mind is a mode of the mind of God and the human body is a modification of his attribute of extension. All things exist in, and all events follow from, the divine nature by a necessity which is the same as the necessity which gives rise to the theorems of geometry. God is the universal, mathematical ground of all things. Nothing exists without him. All depends on and follows from his nature. Man is not free, save as he rises to this insight that he is a true part of the infinite substance. God is the necessary or absolute all-inclusive timeless cause and there is no cause aside from his perfect nature. God is the real being of nature—*natura naturans*—he is the active creative nature. God is the ceaselessly active ground of all events in the world. He is the immanent ground of the world; he is *not* a cosmical soul in the world—the world is in him. He alone is the eternal cause of the whole procession of nature.

God expresses himself to us in two parallel ways, to-wit, thought and extension. Of thought we say that it is both intellect and will, but we must not attribute these to God as we do to ourselves. Our intellect is dependent on sensory stimuli for the materials of thought; our intellect works episodically and inaccurately, but God grasps all things in one timeless pulse of thought.

One conception made famous by Spinoza's extreme formulation of it is the meaning of definition. *Omnis determinatio est negatio*, i. e., all definition is limitation or negation. To define anything is to deny the contradictory of the qualities involved in the definition and thus to limit the object defined. God is above all definition, and in this Spinoza agrees with the Neo-Platonists and with the speculative mystics of the type of Bruno and Meister Eckhart.

Spinoza really has two inconsistent views of the nature of substance. In the first place, substance is conceived as an indeterminate absolute without any definite nature, and secondly, he means by the absolute the totality of things regarded as a unity. Spinoza does not attempt to prove that there is only one substance. This is for him a rational intuition, the self-existent totality of being. All that is, is. But has he the right to further assume that all that is, is a single being or unity? ¹

¹ I am indebted to E. Caird's article on Cartesianism in the *Britannica*, 11th ed.

3. THE HEGELIAN CONCEPTION OF THE ABSOLUTE.

In recent years there has been a marked revival of the doctrine of Hegel. The leading exponents of this view are Bradley, Bosanquet, and Royce.

Hegel wrote many works and these are all difficult to read. In language which is often obscure and is made doubly so by his tiresome iteration, he argued and reargued his views. At bottom his point of view is that the absolute is the all-inclusive unity of the Cosmical Spirit or Mind, and it is this point of view which he has so elaborately worked out as to make him the father of a distinctive school. His position is called absolute idealism. This view is to be sharply distinguished from the Berkeleyan and Leibnitzian idealism which we have already considered, since the latter recognizes the distinctive reality of finite selves and is, hence, pluralistic. For Hegel the Absolute or the all-inclusive unity is Mind, Spirit, Geist. For Bradley, the Absolute is Experience. For Royce, it is an Absolute Self or Individual, the Eternal Knower and Fulfiller of all finite purposes and meanings.

Hegel starts from the position that nothing can be real apart from consciousness or experience. We know nothing about anything apart from experience. Reality is that which is present in experience. At this point Hegel shows, by his famous dialectic or argumentation, that all finite being is related or dependent. We cannot say anything about anything except by reference to something other than

what we talk of. Thought is a process of Othering.¹ Likeness, for instance, has no meaning apart from difference. The floor implies the walls, the sky implies the earth, 'I speak' implies that there are ears that hear. Even a single object such as an orange is a relational whole of different or opposed qualities—for round is not sweet, yellow is not round, and juicy is not yellow and so on. Cause and effect have no meaning apart from one another. Change and permanence, essence and accident, substance and attribute, force and its expression, imply one another. So too in the vital and human world. Life and death go together, humility and pride, the individual and the family, the family and the larger community of city and state, go together. The individual lives in and through the species, the species lives in and through the whole of living existence. Life and its physical environment imply another. Inorganic and organic, mind and body, self and society, finite and infinite, God and the world, are interrelated in the whole, which is an organic system. Everything finite is related to something other than itself, and it is the unity of its opposite qualities. Anything can be the "same", i. e., be itself only by reference to an "other", i. e., a not-itself. We can think of nothing that does not imply relations.

Kant had tried to solve this problem by saying that we know only appearances or phenomena. In our knowledge there are two factors—forms and

¹ Bradley, Royce and the Pragmatists share this view of thought.

sensations. Forms are the organizing or relating activities of the mind; sensations are the unorganized content which come to us from we know not where, and it is because of this dualism between the forms of thought and sensation that knowledge for Kant is transcendently ideal, while it is valid only empirically. We can have no knowledge of things-in-themselves.

Hegel's view is that a thing is what it appears to be. He holds that the Kantian distinction of phenomena and noumena is illogical. For Hegel everything is related. Reality for him is the systematic whole of interrelated qualities. It is not something remote or beyond our world. God is not something behind the stars. He is what he appears as being. Of Herbert Spencer's conception of God as Infinite and Eternal Energy, Hegel would doubtless say, he does not go far enough. God is all that Spencer says, but he is also much more. God is thought and will organizing a spiritual world, as well as energy and life. Reality is to be interpreted in terms of experience. The completest manifestation of God is to be had in human life. This unity must also exist for itself "*für sich*", i. e., it must be conscious, or it must be spirit. Things are related. They constitute a unity, and they exist only for a self. Our experience is only a fragment. Our selfhood is finite. God is the Absolute Mind for whom the whole organized system of things exists.

The process of the world is the ever increasing manifestation of absolute mind. The significance of the life of Christ is that in him God came to the

fullest self-consciousness attained in a human individual. In no finite mind does the thought of unity constitute the unity of the world, since the unity of the world is present to no finite mind. Therefore God is the absolute thought or mind, the absolute individual, and the measure of reality is individuality. The more any being is an organized totality, a coherent system of internal relations, the more individuality and reality it has. God is the absolute totality of relations.

The real is a living process, purposive and rational, an organized rational unity or spiritual system which is the Absolute Mind—God—in nature and in humanity, but realizing himself most fully in the spiritual life of the highest civilized humanity through the forms of social organization, art, religion and philosophy, in which God comes to the fullest consciousness of himself that is possible through finite beings. Thus reality is a spiritual process that ceaselessly realizes itself in the successive steps from unconscious nature to the most fully organized rational mind, and this fully organized rational mind is achieved in civilized society—in the civic community, the state, the work of art, the church, and at the very summit in philosophy's understanding of the whole process as the self-revelation and self-fulfillment of Absolute Mind. The Absolute is a spiritual system, a whole of interrelated, living, thinking, willing beings which exist as a whole in and for God—the unitary spirit of the whole. God is a spirit living in his own concrete differences, men and things. Mind

is the true whole, but not any finite individual mind or system of minds, since these never constitute a perfect self-sustaining, self-existing unity. The Absolute Mind—God—of which all finite minds and societies are parts, is the ultimate and true reality. All stages and forms of organization and all the works of culture—all organized social life, all art forms, all religion and all science, are stages in the increasing apprehension and comprehension by the finite mind of the Absolute Mind, in and through which progressive apprehensions and comprehensions the Absolute Individual or Cosmic Mind comes to fuller self-expression in the temporal order. Of the whole unceasing process by which "the thoughts of men are widened with the process of the suns", God is the Eternal Ground.

The following are the chief points of contrast between the various leading forms of recent singularistic idealism or spiritualism. Whereas Spinoza's absolute substance is statically conceived and only by a pretty thoroughgoing inconsistency can be admitted to include individuality and purposiveness, Hegel's Absolute is conceived to be a dynamic and purposive totality of process, in which the various degrees of finite organization or systematic and rational wholeness embody the Absolute precisely in the respective degrees to which they are organized wholes. Inorganic and organic nature, the minds of individuals, the objective mind embodied in the organized social institutions of family, civil society and the political state, and absolute mind,

which comes to more adequate conscious self-realization in the products of human art and in religious ideas and acts and which finally attains full consciousness of itself in philosophy—all these factors of the actual world are, in the order given, stages of increasing meaning and content in the ceaseless self-realization and self-incarnation of the Absolute Spirit or Individual. Hegel nowhere definitely calls his absolute a self or personality. Therefore his disciples have disputed as to whether the philosophy of the master has place for the personal God of theism and for a belief in human immortality. My own opinion is that Hegel's Absolute can only be an impersonal spirit and that human immortality has no importance in his system.

Bradley explicitly denies that the Absolute can be a self. It is an utterly harmonious experience and, therefore, it must be beyond the distinctions of self and other. It can have no objects beyond itself to know, no objectives for its will and hence no will or purpose. It includes truth, goodness and beauty, but, in its ineffable perfection and harmony, it is beyond our human notions of goodness and truth, since for us these terms have meaning only through contrast with their opposites. What an experience can mean which no self owns or enjoys Bradley fails to explain.

Royce explicitly holds the Absolute to be the Self of selves and the eternal fulfillment of all purposes and meanings.

4. FURTHER IMPLICATIONS OF SINGULARISM

The singularist argues that there is an analogy between the relation of the various sub-systems of ideas in a human mind and that mind as a whole, and the relation of all finite minds as constituting the system of the Absolute Mind to the Absolute; i. e., the human mind is the organization of a given body of sub-systems of ideas, while the Absolute Mind is the organization of all the minds as such. From one point of view reality may be conceived as a society of selves. From another point of view, reality may be conceived of as only the one all-inclusive mind. The world is a rational unity in which all meanings are fulfilled, all purposes realized, all problems solved. The world is an Absolute in which there are already the cures for every disease and the solutions of all problems.

Spinoza at times appears to regard the notion of reality as this static unity, but yet he has to find a place for change and all the mutations of the temporal in his Absolute. This problem is a difficult one for any person who takes such a point of view, and it is interesting to see how Spinoza meets the problem. In the first twenty-seven propositions of his *Ethics*, he discusses this bare abstract unity and he then makes the suggestion that we now talk as the common man does and thus he begins to talk of finite things. This is the arbitrary way in which he, and not he alone, makes the transition from the infinite to the finite, from the eternal to the temporal. It is very difficult for one both to eat his cake and keep it. So it is difficult to keep this ab-

stract unity and also to conserve change. To recognize that there is any meaning or any significance in this world of time and change, is to put a severe strain upon the timeless unity. Our lives and that of others are involved in time. Life is a process of getting up, getting dressed, getting to work, getting to eat, getting to sleep—in short, it is one thing after another. But the Absolute is an all-inclusive, unchanging principle. But what is the relation of these two to each other? For Hegel the eternal fulfills *itself* or *himself*, change takes place *in it*; it does not change. All the biographies of all individuals and all worlds coalesce in the Absolute, which is an eternal, timeless whole.

Royce is far more emphatic in his insistence on the significance of the temporal. He calls his position absolute pragmatism. God is the complete fulfillment of all the meanings of our ideas. Ideas are plans of action. They are not reports of the structure of things. Ideas are not cognitive functions so much as practical guides. Idea has an aim, it is purposive, it is something which requires its own fulfillment. The Absolute is the final fulfillment of all our ideas. The Absolute is the inclusive will or purpose. For the Hegelian or the Absolute Monistic Idealist, our temporal experiences are elements *in* an unchanging whole, and our errors, sins and failures, are transmuted into the perfection of the Absolute. All of our sufferings and imperfections contribute to the harmoniousness of the whole. The whole is a perfectly harmonious and

blissful unity. In the whole the good is eternally achieved.

Let us say a few words of the moral and religious implications of this theory. These implications are optimistic, deterministic, quietistic and mystical. Singularism is essentially deterministic. The only freedom for the individual consists simply in a clear-sighted recognition by the individual of the fact that he, like all else, is a necessary element in this perfect whole and that his whole function is submission to this Absolute. Job expressed this attitude when he said: "Though he slay me, yet will I trust in him". Every deed, every fate of each finite being, is as it should be and it could not be otherwise. The lout, the imbecile, the fool, the debauchee, the saint, yes and even the wise man,—all have their lives as determined elements in the Absolute Whole. The only freedom is the willing recognition of the dependence of all things as parts of the Absolute. The second attitude or rather, implication, of this viewpoint is that all is well with the world, God is on his throne, let no man worry. This is the optimistic implication of Singularism. Of this attitude the poets have frequently sung, the orators have often spoken, and the philosophers have repeatedly written. In connection with this implication we have the fact that the goal of absolutism is, from the religious point of view, quietistic in much the same way as is that of Neo-Platonism. With Singularism of all forms there goes a certain type of mysticism. There is the *unio mystica*, an experience in which we feel the consummation of

r being and this consummation expresses itselfotionally in what Spinoza called the *amor intellectualis dei*. The ultimate good to the wise is theight that all finite beings have their measure ofing in the Infinite. This quietistic attitude reved its classical formulation in the Leibnitzianpothesis—in the statement that this world is thest of all possible worlds. For the most adequateicature of this position read Voltaire's *Candide*.

5. CRITICISM OF SINGULARISM

1. Singularists, at least some of them, namelylkins and Royce, speak of the Absolute as a Self, a Person. The Singularist talks about the meanr of reality and about the will of the Absolute. r conception of a self is always of a being who a self in relation to other selves. Genetic psycholgy affords us abundant ground for this. The mateals out of which the notion of selfhood is formed e in a way given us, yet selfhood develops in cial relations. If there is no other being distinct om the Absolute, then how can the Absolute be a f? Fichte expresses this social dialectic in these ords: *kein Mensch ohne Menschen*. Bradley says at the Absolute is an Absolute Experience. Hegel lled it *Geist*, and in this way I believe they were ore consistent than Royce. We have no justificaon for calling the Absolute a Self, unless there is is general social interaction. In Royce's later view e Absolute is the Spirit of the perfected Society the *Beloved Community*.

As to the Bradleyan conception, I can here only say that I know nothing of experience unless it be the experience of a self. Experience, i. e., Absolute Experience in the Bradleyan sense, is a mere psychological abstraction. These men also say that the Absolute is timelessly perfect, and that as a unity it is beyond both time and change. How can there be purpose in such a unity? Purpose is an aim, a goal, that is postulated, and if there is no change and no time, then there is no such thing as cosmical purpose. Bradley agrees with this and says that, from the point of view of a timeless Absolute, there is no place for development, no progress or evolution in the sum of things; these are mere illusions. For the Absolute there is *no* change. The Absolute may contain histories without number, but it can have no history. Therefore all the changes and histories which are included in the Absolute must, in sum, cancel one another as factors in the harmonious equipoise of the timelessly perfect experience.

2. I think that I exist as a fragment, as a unique being, and I think of you as existing likewise. You feel things and no one else feels your feelings as you feel them. Each believes himself to be an individual self. What kind of existence can you and I have from the point of view of the Absolute? Our existence is illusory, erroneous, from the Absolute's point of view. How does the Absolute know me as a minute constituent in its constitution? This is surely a very different type of experience from the way in which I know my-

self. If the Absolute is really the absolute knower, I must exist only as the Absolute knows me and I do not exist as I know myself. This is one way of showing the inadequacy of finite knowledge.

3. We have already seen that there is no freedom on the part of the human self, save as an absolutely determined part of the whole. Practically, this is a useless conception. It cannot be made applicable in courts or in any of our social institutions. Indeed social practice would be impossible if this assumption were true. As a working point of view, we must assume responsibility and we have already found that in the long run the demand is honored by the race. Singularism, therefore, does not agree with our practical consciousness of freedom and responsibility.

4. All sin, vice, suffering and other evils, are viewed by Singularism as being contributory to the universe as a whole. Sin is sin only from the finite point of view, but if viewed *sub specie aeternitatis*, it is seen to be contributory to the perfection of the whole. All is right in this world, all is for the best, let us therefore experience nothing but blissful contemplation of the Absolute. This Absolute, which is nothing but an everlasting stare, an *unendliches Blick*, is the touchstone of reality for Singularism.

6. PLURALISM

This is the view that there are many beings, that the universe consists in some way of a society of individuals. McTaggart's pluralism is the view that the universe is made up of eternal selves, that

there is no coming into being or passing out of being. This view does not conform to experience. Finite selves are developmental.

Leibnitz's view is a pluralism with a monistic basis and it is a form of pluralism that is most profoundly original. The significant thing for us here is that the world is regarded as a society of selves, and these members constitute the society because of a pre-established harmony or unity. The members of the society have originated from God. God brings self-determining individuals into existence and these develop into a fuller selfhood. The universe is therefore a developing one and all individuals, within limits set by the supreme monad, are self-determining. Leibnitz thus has a creative ground of the existence of the selves. This view has certain defects. First, the Leibnitzian conception of evolution is not that of today. Evolution for Leibnitz is the mere *unfolding* of what is already implicit in the germ. Our conception today is epigenetic. Leibnitz's conception is the old Chinese box theory of evolution. The biologist of today argues, on the basis of experimental findings, that the organisms and selves are not completely self-inclosed; they interact and thus they are modified.

The second point of weakness in the Leibnitzian conception is his failure to make an organic connection between the unity of experience and its manyness. With these two aspects corrected, we can today, without reservation, accept this theory of Leibnitz.

7. MY OWN STANDPOINT

I regard the world of selves as generated in time by the creative activity of the world ground, and I further regard this process of generation as being without either beginning or end. The development of individuals in this process consists in their education into fuller self-determination. The goal of the process is the attainment of rational freedom as unique individuals. There are specific conditions in the environment for the development of individuals. There are two types of environment, viz., physical and social.

Reality, I conceive to be a process and evolution in time, and the goal of this process is the realization of selfhood in society. Inasmuch as there must be a source for the energy and the individuality of individuals, and inasmuch as evolution takes specific direction, i. e., moves towards certain values, I regard God as at once the ground or sustainer of the process and the conserver of values. The world is a dependent reality and in it selves have a relatively higher degree of independence than do lower beings. There are thus stages and degrees of individuality, freedom and independence, evolved in the process of evolution. The human self is free and responsible within limits and the human self is clearly the product of the whole process.

The motives and facts that are involved in Singularism and Pluralism might be reconciled in the following way. Let me say here, however, as an indirect mode of stating the reconciling position,

that there are two objections to most forms of Singularism. It is evident that either one or both of these objections apply to the variant forms of Singularism, i. e., to the Substance Singularism of Spinoza and to the Idealistic Singularism of Hegel, Bradley, and Royce. These objections are (1) that Singularism does not succeed in finding a perdurable basis for the human self. The invariable tendency of Singularism is to deprive human individuality of its place and worth in reality. It invariably derealizes the human self and it effects this derealization by reducing the human self to a mere appearance of an ineffable Absolute, and this treatment, while it confers a certain honorific quality on the individual, ends by surreptitiously expunging or extinguishing the individual. So that I think it is not unjust to say, if absolute Singularism is true, then our individuality, our freedom, our responsibility, our meaning and our worth, are only egotistical illusions. This may be true. Perhaps we are not any more significant than

"The flies of latter spring,
That lay their eggs, and sting and sing,
And weave their petty cells and die."

It is strange, however, that our life should have such a sharp tang, if this be all there is to life. It is equally strange that life should appear to exist in the only way in which it immediately appears to exist, i. e., as the life of distinct and separate individuals. What we actually experience is individualized striving, suffering, hoping, dreaming,

achieving, and even hoping when achievement falls short. Before we abandon our common sense conviction as to the reality of our individuality, we shall claim the right to be shown why we should give up this conviction. (2) The second objection is that absolute Singularism regards the absolute as timeless and all-inclusive. Hegel insists that reality is a process. Royce also repeatedly lays great emphasis upon the purposive and volitional character of selfhood. But the process, as ultimately regarded by these men, turns out to be more a function of implication than of actual causal sequences. Royce goes so far in his latest work as to conceive God as the spirit of the beloved community, and here he really abandons Singularism. Kant said that time is a form of our intuition or perception. Things-in-themselves may not be, indeed are not in space and time. What conception can we form of a reality in which there is no temporal movement? Evolution as a natural process antecedent to human history; history which is but the story of the evolution of human culture as this has veered in its ups and downs and the whole innumerable series of developing individuals,—these are all temporal processes and they cannot be reduced to something which is not temporal. With what special acuteness does the average student realize a few days before the finals what a relentless master time is? It is only when care free that we forget time. "Dem Glücklichen schlägt keine Stunden."

Our world is a temporal world, and, for my part, I can accept no philosophy which begins with

a mystical flight from the temporal world. On the other hand, the numerical Monist or Singularist urges against the Pluralist that the universe is one, that there is a unity of structure, or, as Royce expresses it, there is a unity in the types of order in the world. No doubt all things are related in some fashion. Co-existence in space is one form of relation, but this is not necessarily a very significant or relevant type of relation. Culture relations, such as are ours by virtue of our life in the university, are more significant than our mere spatial relations on the campus. All events are temporally related; this also may or may not be a very significant type of relation. Singularism is right in insisting upon the existence of some sort of relation, but it errs in assuming that all forms of relations may be ultimately reduced to the whole-part type. I agree with the Singularists that there is some sort of unity or continuity in the world, but I do not agree that the discreteness of the different types of empirical existents overthrows the validity of the systems of continuity. There is a unity, viz., of the solar system; there is a unity of a fine machine, e. g., a watch; there is a unity of a living organism; and finally, there is a unity of a society of like minded beings. The differences between these unities are much more significant than the likenesses, and I see no way of discovering some common denominator which will effect a reduction of these unities to one. The tendency of the Singularist has been to reduce all forms of unity to that of the unity of the universe, and then, subsequent to this reduction, he

emotionally glosses over this type of unity with religious predicates. He baptizes this abstract unity with the most acute form of emotional experience.

Is it not more reasonable to suppose something of the following order, viz., rather than reduce all kinds of unities to one type, let us conceive a world-ground which is not identical with these unities? Such an assumption would enable us to take full cognizance of all the facts of Singularism and Pluralism. God is the source of whatever degree, or of whatever kind, of unity there is in any of these various systems. God in his own interior being is richer than the sum of the unities that we find in the universe. There is a world of partly independent, responsible individuals. This world is not eternally complete, and in this world God shares in its growth. God is not an aristocratic Deity apart from the grime of this universe. He is the energizing Good, and at this point this view is at one with Plato's. God is not a One in which all individuals are swallowed up and disappear.

This problem of the one and the many involves the place and the status of individuality in the world. The Singularist is the extreme realist. For him the particular is absorbed in the unity. The extreme Pluralist dissolves all unity and thus he is seen to be a revised edition of the extreme nominalist of former days. For him there are no universals and no general types of relations. The mediating position is that we make the relations by reflecting on the data of experience and generalize upon the

basis of the results of reflection, and this generalization rests upon the order that is in the world.

Before bringing to a close this grand tour in which we have touched only the high spots and have seen only a few of the most important sights, let me give a few words as to the moral and religious implications of pluralism. The standpoint of Pluralism is *melioristic*. The world may become better. It is not absolute optimism, the viewpoint that all is well with the world, nor is it absolute pessimism, the view that the world is irretrievably bad. From our standpoint also we must admit that there are evil, sin and suffering here. These really take place, but they can be regarded as the conditions for the development of free personalities. They are a part of the process of education. But the superlative character of the good renders all this suffering excusable. One very interesting question emerges at this point. Does the very ubiquity of evil, sin and suffering, suggest the question as to whether there is not some obtrusive element which forces us to admit a dualistic strain in the structure of the universe? Bergson's suggestion at this point is that such is the case. The *Life force* ever strives upward, *matter* ever pulls downward. (Plato recognizes a similar situation.)

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CHAPTER XXIII

THE PROBLEM OF EVOLUTION AND TELEOLOGY.

1. THE RISE OF THE DOCTRINE OF EVOLUTION

The theory of evolution is as old as Greek philosophy, but it was not until the nineteenth century that the doctrine of biological evolution became the most deeply influential and far-reaching of all scientific conceptions. During the sixteenth, seventeenth and eighteenth centuries, the concepts of mathematics and mechanics were dominant; but since 1850 these have gradually been made subordinate to the notion of evolution. This change is the result of the work of Lamarck, Darwin, Wallace, Huxley and others. The labors of these investigators carried the concept of evolution over from the status of a speculation to its present status as a well established scientific theory. These men adduced a great mass of evidence which sustained both the *fact* and the *methods* of evolution. Up to the time of these men the prevailing view was that species were fixed. This view had prevailed from the days of Plato who, in his epistemological language in the doctrine of Ideas, had hardened species into fixed and permanent types.

"All things flow," said Heraclitus. Today the evolutionist again throws all things into the flux. Not even the truths of logic and mathematics are exempt from the influence of change, according to

the thoroughgoing evolutionist. Evolution means change, but not blind and chartless change. It is change in describable and definable directions. The evolution of organic life means the descent of the more complex from the simple by the operation of causes which are similar to those observed in operation today. This type of describable or lawful change means increasing diversity *in* the parts and increasing interdependence *of* the parts.

Herbert Spencer describes the process of evolution in words that are quite ponderous but, notwithstanding this feature, they neatly express the state of the matter—"Evolution is progress from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity and involving concomitant processes of differentiation and integration". In these few words are summed up for us a description of a process that has been going on for eons upon eons.

The evolutionist begins with the simpler phase of the evolving object. He makes no claim to be competent to deal with absolute beginnings. The substance in which life embodies itself invariably involves the colloids. The biological evolutionist starts out with protoplasmic colloids. The colloidal substances differ progressively in complexity both of structure and function. This diversification is at a minimum, not even apparent through the microscope, in some of the lowest forms. Socrates, in the *Phaedo* and other of the Platonic dialogues, has given us a caricature of the notion of evolution, and in this caricature is the view that the parts have

been developed wholly independently of one another and later, by some *deus ex machina*, the aggregate of parts have been assembled in much the same way that a modern machine is assembled. From the modern evolutionary standpoint the organism develops, *as a whole*, into increasing diversity and interdependence of structure and function in its distinguishable but not separable organs. The higher, that is the more complex, the organism the greater the degree of interdependence in the parts. There is increasing interdependence of the parts of the living organism as life ascends the scale. We may cut a worm in two and, partly because of its annular structure, it develops into two worms. We may do the same thing to a magnetized bar of steel. Cut the bar at the indifference point and we find that we have two bars with their positives and their negatives and their indifference points. This is not true of man or, indeed, of any complex organism. We cannot cut man in two and have him develop as the worm and the magnetized bar.

The conception of evolution has been extended beyond the organic sphere, both below and above. Geologists hold the evidence to be indisputable that the earth is the result of evolution. No other hypothesis is adequate to explain all the observed facts. The glacial striations, order of the rock series, fossil remains and other phenomena are best explained by the hypothesis that the earth has gone through vast evolutionary changes. Paleontology and biology re-enforce one another. The remains of fossilized life in the geological strata correspond,

roughly, with the biological scheme of evolution. To the astronomers also the most plausible hypothesis to account for facts revealed by the telescope, applied mathematics, spectrum analysis, and sidereal photography is the view that the solar system is the result of evolution. The nebular hypothesis with its vortex movements in the cooling nebulae has been supplanted by the planetesimal hypothesis. This hypothesis is only a more explicit recognition of the gathering of stellar dust around certain nuclei and their development into our present system.

Above the development of the organic life, the hypothesis of evolution is applied. Consciousness itself is said to have evolved from simpler to more complex forms. Psychology explicitly builds on the conception that consciousness has evolved. Man's own history is also an evolution. Humanity's whole cultural history, morals, language, social organization, science, art, religion, and philosophy itself, are the products of growth. It is a very interesting fact that, before the hypothesis of *biological* evolution was developed, Herder and Hegel had conceived, and at great length had attempted to carry out the notion of an evolution of human culture, thought, social institutions, morals, which the philosophers and the scientists of the 17th and 18th centuries had been saying, with Hobbes, Locke, Rousseau and others, were the result of invention, but are now agreed to be matters of growth. The old concepts of sudden causation, of divine creation and revelation of language, culture and society, and of the origin of political society by deliberate human

contract, were supplanted by Herder and Hegel, and the Growth Thought was introduced in their stead. Like Topsy in Uncle Tom's Cabin, there is a recognition that things have grown to be what they are. Philosophy elaborated this point of view and successfully applied it to man's whole cultural history before the biologists applied it to organic life.

EVIDENCES FOR ORGANIC EVOLUTION

(a) The fundamental similarities in the structures of skeletons and cells of all vertebrates is a witness to a certain type or degree of continuity of all vertebrates.

(b) Embryology has indisputably established the fact that the embryo gives us a telescopic or epitomized recapitulation of the whole evolutionary process. The embryo of all vertebrates recapitulates in its ontogenetic history all the stages of the phylogenetic series.

(c) The existence of vestigial organs shows that they must have been at one time useful to the organic form. The most notorious instance of such an organ is the vermiform appendix, for which the biologists have struggled in vain to find a use.

(d) The facts of geological distribution of flora and fauna can be accounted for by evolution. The kinship of the flora and the fauna of Australia and Papua is taken to mean that they were once parts of one continent and that it was only afterwards that they were isolated.

(e) The facts of paleontology are also a basis for this view. Huxley, for example, has given us a

sketch of the stages through which the equine form has passed from eohippus to the present horse. Huxley has reconstructed this series.

2. THE METHOD OF EVOLUTION

The doctrine of evolution remained a philosophical speculation until the nineteenth century. Lamarck and Darwin, both of whom had a number of forerunners, were the most original in formulating theories of the *method of evolution*. The advocates of the fixed species view had challenged the biologists by asking them to say how evolution can take place.

Lamarck pointed to the facts of adaptation to environment, and to the effects of use, and argued that, just as organisms now develop new functions and thus modify their organs in response to the needs of the organism, so the process of striving and consequent modification of organs has been going on in all domains of life and the results of this process have been inherited. There has been a transmission of acquired characteristics. The giraffe got his long neck by reaching high for the succulent leaves of the trees and the tortoise got his horny back by striving to protect himself. The fish got his light ventral side as an adaptation to the upper air and his dark, mud-colored back as an adaptation to the bed of the stream. This double adaptation enables the fish to escape his enemy, for if he is nearer the surface of the water, by mounting upward he escapes his enemy because he has the color of the upper air, and if he chances to be

nearer the bottom of the water, he escapes the enemy by dropping to the ground and is indistinguishable from the bed of the stream. Responsiveness to the wants or needs of the organism and inheritance of the results of successful response are thus, for Lamarck, the chief factors in evolution. There is, says Lamarck, an inherent tendency in living forms to expand and to enlarge their parts, up to a limit set by the living body.

Darwin and his fellow workers made an epoch making contribution to the subject. Darwin discovered, and supported by evidence, a reasonable method by which evolution takes place. Darwin took note of the fact that breeders selected the qualities which they wanted and they interbred those individuals that had these qualities and thus developed new species. They bred from those species that had the characteristics which they wished to perpetuate. The breeder pre-supposes the variations. What in nature takes the place of the breeder? This is Darwin's question. His answer is—*natural selection in the struggle for existence*. Because of the great fecundity of life, of the frequent variations that living forms undergo, and because of the fact that living forms must struggle to survive, those types which develop characters that enable them to fit the environment, i. e., to endure heat and cold, to conquer or escape their enemies, to get food and digest it, survive.

Mental and moral evolution are to be explained from the same general standpoint. There are fortunate variations in the way of quantitatively vary-

ing mental power, memory, power of inference, and greater perceptual discrimination; all these are powerful instruments in the struggle for existence. Man's moral ideals and his religious practices are types of technique that are evolutionary in character. The group that hangs together the best wins the conflict. And moral and religious beliefs and practices are cohesive forces.

The Darwinian doctrine seems powerfully to support the view that all the changes that take place in this universe are really the consequences of mechanical motions. The mechanistic or materialistic metaphysics involves the denial of any directing principles in the world process. The defenders of teleology argued that the observed adaptation of organs to one another and of organisms as a whole to the environment could be explained only upon the assumption of a world-designer. Naturalistic selection explains these adaptations on mechanistic assumptions. Given original variations, all the rest follows. This is the point of view of natural selection. Given reproducing organisms, varying as they do because of the unstable character of the compounds of C, H, O, N, P and S, the environment will do the rest. This selection hypothesis affords a very plausible explanation of the wastes, the failures and the monstrosities of organic nature. The great optician Helmholtz once declared that if his laboratory mechanic should bring him an instrument so imperfectly constructed as the human eye, he would discharge him. Instances of lack of good adjustment, the cruel and wasteful processes of nature,

the sufferings, the injustices and the stupidities of life, in which not even the righteous man seems to triumph, are explicable on this hypothesis. Yes, Bismarck, if this hypothesis is true, God is on the side of the strongest battalions and ultimately might makes right, and the good which Plato placed at the apex of the universe has been made to give place to ruthless might! God is, then, but a misleading name for the blind pushes and pulls of physical forces.

The advocate of teleology replies to these arguments as follows: —

The mechanical theory does not account for the original organization of the universe, for the origin of life or the origin of consciousness and reason. The theory of evolution itself involves a kind of teleology which is more than the rubrics of mechanism take note of. We are here, and we are purposive beings with our capacity for the recreation of the natural environment. We are parts of nature—we are the products of nature. Thus the evolutionary process has produced beings that in part can control it. The human mind creates new conditions of existence. All our cultural ideals and all the institutions of society have been postulated, espoused and made real by human teleological activity. These transcend the considerations of a merely biological struggle for existence.

Humanity has established a whole spiritual complex or set of conditions in the creation, out of the materials of nature, of civilization and culture. In civilization “nurture” or education remakes

"nature" or biological inheritance. This is the creation of a new environment. How different is this conception from the postulation of Herbert Spencer, for whom the moral complex is a matter of increasing the mere length and breadth of life? How different also is this concept from that of Nietzsche, for whom the highest type of life is that wherein man everlastingly says *Ja* to all his instincts? Not the prolongation of life only, not the mere uncontrolled outgo of our prime instincts, but the creation of a new Jerusalem in the way of cultural ideals seems to be the highest characteristics of a civilized human life.

The teleologist insists that the mechanist is incompetent to account for the origin of life, of consciousness and of the spiritual set of conditions that the race has elaborated.

3. THE MECHANICAL AND THE TELEOLOGICAL ASPECTS OF EVOLUTION

Our survey of the doctrine of evolution has convinced us that the old "watchmaker" theory of creation is dead and buried, so far as contemporary science is concerned. The question that now confronts us is this, is there any place, in the light of evolutionary theory, for a *finalistic*, *purposive*, or *teleological* interpretation of the world-process? If this question must be answered in the negative, then materialism is the only rational philosophy and the critical and constructive arguments of the last two chapters have been in vain. There are three logically possible positions on the problem: (1)

materialism or mechanism satisfactorily interprets the whole nature of the world-process; (2) mechanism satisfactorily accounts for much, perhaps the greater part of the phenomena of nature, but at certain specific points it fails and we must have recourse to a purposive principle; (3) from the standpoint of philosophy, which is that of *totality*, that is of *an integral and all-inclusive view of things*, mechanism is a valid scientific programme to be applied as far as possible in every field, but a mechanistic world view is quite inadequate to an all-sided interpretation of the world-process.

Before we consider this problem it is necessary that we be as clear as possible as to what the mechanistic standpoint means. There is much confusion in present day discussions on this topic. Here, then, are several different points of view. (a) A mechanistic metaphysics is identical with materialism. Everything which exists and every change which takes place is the purely mechanical resultant of the movements of mass particles in space. (b) In scientific investigation, including biology, the mechanistic view is a canon or method of inquiry, a working hypothesis. As such it means (1) that the purpose of science is to determine the particular "go" or "how" of every thing or occurrence which it investigates; (2) all science is deterministic, therefore science cannot admit indeterminism in vital phenomena, since to do so would mean to admit that causes or conditions identical in character could have effects varying and hence unpredictable in character, which admission would bring scientific

enquiry to a dead stop; (3) the aim of science is measurement or quantitative statement of its descriptive generalizations; to admit an indeterminate factor is to admit a non-quantitative factor.

Most biologists seem to take the mechanistic standpoint, and assuredly they are justified in using it as a working method as far as it will go. Pushed to the limit it means that there is a determinable and therefore unvarying one-to-one correspondence between every specific physico-chemical complex or configuration of molecules which is an organism and the sum of the manifestations of vitality by that organism. On the other hand, the *vitalists* (and their number includes some distinguished names in present biology, such as Prof. Hans Driesch, Prof. J. A. Thomson, J. S. Haldane, Pawlow) maintain that the experimental facts cannot be accounted for, unless we suppose a non-mechanical agent, a *vital principle*, an organic individuality functioning in the organism; that the regulation of the life of the organism, repair of injured parts, reproduction and other vital phenomena, all presuppose a directive, non-mechanical agency. We have no concern with this quarrel among biologists except in so far as it bears on our more general problem. Mechanical explanation should be pushed as far as possible, for the aim of science is to determine, with the greatest possible degree of precision, the specific conditions under which things take place in nature. This is just what causal determination means, and even though it should turn out to be true that there is a one-to-one correspondence between physico-chemical

and vital phenomena, including conscious ideas and purposes, this would not involve materialism, unless it could be shown that the physico-chemical series is the solely *real* series and the vital and conscious series merely *epiphenomenal*. Such a possibility is very remote.

We might attempt to disprove the assumption of mechanistic metaphysics, as Prof. Hans Driesch¹ has done, by arguing that specific vital phenomena cannot be explained without recourse to a vital principle (which he calls an *entelechy* or *psychoid*) ; or we might proceed, in what seems to me a more effective fashion, to do as Bergson does when he adduces the parallel development of the eye of the Pecten and of the vertebrates, an identical organ fashioned by different means along divergent lines of evolution.² We might, with Bergson, point to the complicated and manifold correlation between organs and parts, to the fact that minute variations must persist and increase before they are useful in the struggle for existence, that adaptation of organisms to the condition of existence takes place and increases along certain definite lines (orthogenesis), that there are useless variations (ornamentation and the aesthetic sense which are correlated), that instincts seem to be remarkable cases of unconscious purposiveness, and that, finally, it is only through supposing that organisms by integral effort, that

¹ *The Science and Philosophy of the Organism*, Vols. I and II. See also his *Vitalismus als Geschichte und als Lehre*.

² H. Bergson, *Creative Evolution*, Chapter I.

is, by effort involving the organism as a whole, develop greater organization with more successful adaptation.* These are all important considerations.

As students of philosophy we should, however, look at the matter in a larger light. The subject we are considering is, like all basic philosophical problems, one of great difficulty and immense sweep. I prefer, therefore, in view of the introductory and fundamental character of this course of lectures, to call your attention summarily to the general principles involved, so that you may have points of view for further enquiry.

A mechanistic metaphysics of evolution falls short for the following reasons. (1) The theory of evolution is a general description of a universal historical process or temporal sequence which includes a multitude of diverse features. It assumes that the same kinds of forces that are now observed to operate have always operated in the world. Now *purposive activities* do operate and achieve things in our world. Humanly, a purpose means the conscious striving for an *end* or *value* and the effectuation of a purpose signifies putting in train the *means* or *mechanism* that will achieve the end. Human finalistic or teleological activity is activity directed either towards the attainment of new values (satisfaction of appetites, wealth, power, knowledge, justice, beauty) or the maintenance of values already attained. Thus in human life there

* Bergson's *Creative Evolution* seems to me decidedly the most important recent work on the philosophy of evolution.

need be no antagonism between mechanism and end — a mechanism devised for one end may indeed defeat other ends, as when an industrial process is run so exclusively for the owner's profit as to destroy the lives of the workers or injure the consumers of the product.

In the life activities of organisms many teleological functions are performed without conscious pre-vision; for example, instinctive activities such as flight, repulsion, gregariousness, and sex, begin by being only vaguely conscious and after having been satisfied become more fully conscious. Examples of adaptive activities that may continue to be unconscious are respiration, circulation, digestion, and even swallowing; while, then, a purposive activity in its higher form has its inception in prevision and the whole process of fulfillment may be accompanied by consciousness, it cannot be gainsaid that a great many adaptive, end-realizing, value-producing activities are unaccompanied by consciousness. It is a fact, which no theorizing can explain away, that purposive, value-producing and value-sustaining activities are now effective on a large scale in nature and still more in human society. This being the case, no theory which explains the present state of nature and human life as the product of blind and insensate mechanical movements, the product of brute accident, has any probability in its favor. A world in which purposive functioning is so large a factor cannot be a world which is the miraculous creation of blind chance. If one were invited to suppose that the differences

between the products of a Shakespeare and those of a navvy were fully accounted for in terms merely of undirected physico-chemical processes, if he were not already a blindly prejudiced adherent of materialism, such an one would smile incredulously. To ask one to accept the above mechanistic position is, however, to ask him to accept only an infinitesimal fraction of what he is asked to swallow by the materialist.

(2) The universe of experience, as we know it, displays frequent creativeness, new discoveries and inventions, new creations in art, letters and industry, new forms of social organization, original human individualities, even new forms of plant and animal life due either to the co-operation of the breeder with nature or to nature's unconscious fecundity. This present world of novelty and creativity in beings and values is, from the evolutionary standpoint, the descendent of a past extending through illimitable ages. The evolutionary story, in whatsoever chapter we may read, whether the evolution of solar systems, of the earth, of animal life, of consciousness or of human history, is the story of descent with *modification*; in other words, of qualitative novelties, different beings, the evolution towards and of richer individualities and values, the appearance of man and civilization, the growth of society, language, art, industry, religion, science and personality. The struggle and the push forward of the vital impetus (Bergson's *L'Élan vital*) never ceases to throb. Evolution is a creative process, a cumulative movement. *So far as we can*

see, its issue has been the fashioning of souls, of rational self-determining creative selves who continue the process by giving it a new turn, that of conscious co-operative activity in the realization and conservation of psychical values. Such is, broadly speaking, the continuity of direction and purpose which makes the evolutionary history of the world not an endless, chartless drifting in the cosmic weather, but an evolution.

If mechanistic metaphysics were true, this whole process would be inexplicable. For a purely mechanical process means only the external interaction of parts juxtaposed in space, a system of interchangeable parts, whereas the evolutionary conception of the world implies an organized and organizing unity of process by which the different phases and stages of the world-history constitute a living whole. In a purely mechanical process there is no place for qualitative novelty, for discrete change, that is, change with a difference. The continuous process of evolution involves novelty, change which brings forth differences; it involves individuality or organization of various qualities into a unity and the production of new types of individuality. A purely mechanical process would be reversible, a cyclical process. *The process of evolution is irreversible.* Even the history of the solar system or the earth's geological history is the description of an irreversible series of events; much more emphatically so, the history of organisms and the history of man. The maxim, "history repeats itself", is but the superficial fraction of a truth. We

are justified in contending that the whole evolutionary process, when viewed as a totality and interpreted in the light of its results in individuality, in organization, in the creation and enhancement of vital and psychic values, is teleological, end-realizing, value-producing. Indeed the notion of a purposive and organizing system, such as we find at the highest level in a mind, or better, in a social life constituted by the interrelation of like-minded but different individuals, gives us the only adequate clue to the character of a continuous whole which develops or evolves in time.

From this standpoint the mechanistic way of thinking is valid as an analytic post-mortem description of the conditions and general features of particular phases of the evolutionary order. Mechanism uncovers the skeleton, but the living and evolving universe can only be fully understood and interpreted from the inner and appreciative standpoint of purposive selfhood. Mechanism lays bare the means by which new results *have been* achieved, but the forward movement of life and the universe, by which novel results *are being* produced, mechanism is inadequate to see and interpret. Reality is life and it lives forward, carrying with it whatever part of its past is really useful for its future creation. The mechanistic and teleological views of reality are both true, but teleology is the higher, more inclusive truth.

If reality in evolution be purposive what are we to make of all the wastes, failures, sufferings and cruelties which we find in nature and human

history? Well, we can see that much of the pain and discomfort, the dangers and obstacles in the natural order are stimuli which incite organisms, and especially man, to a greater activity. A high civilization has never developed either in a tropical paradise or near the poles. The imminence of pain, want and suffering, incite man to effort that, under proper social conditions, is joyful and successful. He makes discoveries and applications, organizes society, develops science, education, and for the enjoyment of his leisure, arts and letters. Yet there is much undeserved and useless suffering. Because of the social solidarity of human beings, the innocent suffer for the guilty, the wise man for the fool, the saint for the sinner. Social redemption or improvement is a social process. Society is lifted up by its best and wisest who strive and often seem to suffer most. There is social progress through the enrichment of man's cultural heritage. So far as concerns the individual or the group, however, ethical justice would demand some sort of compensation for suffering and loss. Admitting that the imperfection of adjustment and the large-scale character of the process account for much of the failure, suffering, and apparent waste, as necessary incidents in a purposive, living and growing universe, it remains true that we cannot, in the light of our present knowledge, see the rationality or justice of all the defects of nature, taints of blood, of all the natural catastrophes and diseases and sufferings which nature visits on man and its other children. We are touching here on a large and dif-

ficult problem, one whose full discussion belongs to systematic metaphysics and the philosophy of religion, and I can but hint at the issues and principles involved.

It is not necessary to suppose that man, in his present stage, is the goal of evolution. Human life here can hardly be other than a transitional phase (though of value in itself) in the development of the supreme purpose and meaning of things. It is not necessary for us to be able to conceive the final goal in order to have the right to believe that the highest ends and values that we can conceive and follow are essential elements in the fulfillment of the universal meaning.

The wastes, sufferings, failures, and evils of the world process have suggested to philosophers, from Plato down to Bergson, that there is in the universe as a whole an obstacle not of its own creation or choosing, against which the Supreme Purpose or Universal Will to life and good must struggle. In Plato, Aristotle and Bergson, this obstacle is a blind, unintelligent matter. In various religious systems it is the cosmical devil or principle of evil. In Hebrew and Christian theism, while the problem is not solved, the view held is that part of the evil in the world is due to man's capacity to sin, which capacity is involved in his freedom to develop into a self-determining being. The possibility of moral evil is thus inherent in man's vocation to moral and spiritual self-education. The evils of nature are regarded as part of God's providential order, which incite man to activity and

which, moreover, have no power to injure man's immortal spirit. The further discussion of these theories belongs to the philosophy of religion and systematic metaphysics and cannot be undertaken here.

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PROBLEM OF EVOLUTION AND TELEOLOGY 251

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CHAPTER XXIV

THE SELF¹

The problem of the nature and place of the Self is of quite central importance in modern philosophy. In this respect there is a decided contrast between ancient and modern philosophy. It is true that the doctrine of the soul plays a very important part in the philosophy of Plato, and that Aristotle's conception of the real as entelechy or individual is derived from the notion of the soul. But we miss the acute sense of the subjectivity, the privacy and uniqueness of the Self, the feeling of the poignancy of experience as personal and, consequently, that consciousness of the existence and difficulty of such problems as how the Self knows the external world or how one self knows another. *The note of subjectivity, the feeling of and for personality*, pervades the greater part of modern philosophy and literature, and is chiefly the result of the Christian emphasis on the seriousness and worth of the soul, or the inwardness of the true life, reacting upon peoples whose whole civilization, as perhaps their original native bent, has tended to foster a keen sense of individuality. Thus at the very outset of modern philosophy we find Descartes, amidst universal

¹ My forthcoming work, "Personality and the World," is devoted chiefly to a thorough discussion of the problem of the Self in all its aspects.

doubt, clearly conscious of his existence as a thinking being. Locke believes in a soul-substance, although he admits it is only an hypothesis. But he is certain that we have empirical consciousness of our own personal identity. Berkeley is equally certain that we can have a *notion* or intuitive consciousness of the Self as the unitary spirit which thinks, perceives and wills. Kant makes the synthetic or organizing activity of the Self (or Ego) the agency by which the disjointed sequences of our sensations are formed into knowledge of nature as a rational whole or ordered world. According to Kant, we do not perceive the true Self, but the "I think" accompanies all knowledge and we may become conscious of it when we will. The Self, as the organizing principle of knowledge in Kant's system is universal—the same in all men, since it is simply the power of intellectual synthesis. But the self is individualized in the fulfillment of one's moral vocation. The Self as purely moral will, subjecting itself to the commands of duty, is the real individual. Kant's disciple, Fichte, builds his whole metaphysical system of ethical or spiritual idealism on the intuition of free self-activity in the individual's moral will. The existence of other selves and a world of nature are deduced as necessary to the fulfillment of one's moral vocation. Hegel makes selfhood or spirit the key to the structure and meaning of the world, although it is doubtful whether he regarded the Absolute as a self-conscious individual. More recent idealists such as Bradley and Royce make the Self or individual center of experience the

clue to the nature of reality. Royce especially emphasizes the volitional character of the self.

One great iconoclast, David Hume, challenged the grounds of belief in a single or unitary and permanent Self in a classical passage in which he asserted that he could find no Self when he looked within himself, only particular impressions, ideas and feelings in perpetual flux and movement.¹ The modern phenomenalistic idealists, such as Mach and Pearson, take the same position. As for psychology, William James argued that the only Self which psychology knows or needs is the momentary "unity of the passing thought".² Nearly all psychologists would agree with him. Some, such as M. W. Calkins, contend that we have an immediate feeling of selfhood, and therefore the Self is the most real thing we know.

But the self which I feel immediately is not identical with the Self which is held, by the man in the street and by many philosophers, to exist as a substantial reality. For (1) in the first place, when I am self-conscious, that aspect of myself which is conscious cannot be identical with that aspect of my supposed self concerning which I am conscious. The contents or data of self-consciousness are ever fluctuating, though not so much as the data of our consciousness of a world. (2) At any moment I may, it is true, be conscious of the unity of my thought, but what I mean, when I say that I believe in the

¹ Hume, *Treatise of Human Nature*, bk. 1, part 4, ¶ 5-6.

² James, *Principles of Psychology*, Vol. I, Chapter 10.

Self as a single and enduring reality, is that there is a permanent, intelligent and purposive principle of action which is my real self. (3) What I regard as the center or core of my selfhood varies from time to time and is largely dependent on the influence of my social, and even my physical, environment. I am a quite different person cold or warm, hungry or satiated, happy or miserable, successful or failing, popular or disliked, wealthy or poor, playing or working. As my bodily condition alters so my conscious and active selfhood alters and my bodily condition depends in large part on the physical environment. As my social atmosphere alters my self suffers alteration too. If the self be not wholly a product of physical and social influences, it is, at least, notoriously subject to alterations at the hand of these factors. (4) The actual self is clearly a changing complex of experiences—of perceptions, wants, feelings (emotions and sentiments), strivings, purposes, ideas, satisfactions and dissatisfactions. The complexity and instability of the actual self is signally evidenced by the many striking cases, which have been written up in recent years, of multiple personalities. Two or more different "persons" or characters may control the same living body in successive periods, longer or shorter, or in alternating periods. Even different characters or complexes of feelings and strivings may struggle simultaneously for the control of the body. A "personality" may disintegrate. An individual may suffer loss of his normal or average selfhood and become quite different; he may permanently re-

cover his former selfhood or he may oscillate back and forth between the old and the new. Logically, we should not even speak of "he" or "she" in such cases, for "he" cannot recover himself from a state that was not "him" at all. (5) We are discussing the consciousness or experience of selfhood; but as a matter of fact, at any moment, by far the greater part of one's personality as it is believed to exist, by oneself, one's friends and associates, is not in consciousness at all. At the present passing moment, all that is in my consciousness clearly is what I am writing and, more dimly, the skill and tools with which I am doing the writing. All my other accomplishments and defects are out of consciousness. Where are these? Is my selfhood chiefly an unconscious substance or enduring complex of psychical powers or dispositions, or is it a mass of brain paths or engramms in the central nervous system?

The Self then is not simple or unchanging. Plato's doctrine of the soul will not hold in the face of the facts. The Self, whatever it may be, is certainly largely the product of its surroundings, unstable and dependent. And yet we do inexpugnably feel in our best moments the reality of our individualities. We feel ourselves to be responsible agents, and society treats us as such, in education, social and business intercourse and law. We feel ourselves to have enduring natures which are expressed in the purposes which we pursue and cling to, even amidst seeming shipwreck of all our hopes and plans. The stronger among us persist in being

true to ourselves, in pursuing our chosen aims and ambitions, in serving our elected ideals of life. And society, almost by instinct, recognizes and respects, yes even worships, the strong and self-reliant individual. It turns to him in its days of perplexity and distress. The history of human progress is chiefly the story of the creative beginnings made by great individuals in all directions. Knowledge, discovery, invention, industry, politics, education, art and even religion are modified, reconstructed, added to, propelled by the creative, exploring and organizing individuals.

Must we conclude that selfhood is complex and yet a unity, ever changing and yet permanent, passively moulded and yet truly self-creative and creative of other existences and values, a partially unorganized mass of cravings and experiences and yet an active organizing principle, the creature of its environment and yet the recreator of environments, the product of the universe and yet the best clue to the meaning and purpose of the universal order? Yes, I think we must answer these paradoxical queries in the affirmative.¹

The Self is subject and object. It feels itself to be "I", and yet the "I" is vastly more than the self at any instant feels itself to be. "I" and "thou" have meaning only because there is a feeling of selfhood, but this immediate sense of selfhood is but the starting point upon which is built the notion

¹ I have discussed this problem at length in my forthcoming book, "Personality and the World."

of *selfhood or individuality*. The latter is a *construction of thought*, but we have the best right in the world to believe that it is a valid construction.

For (1) the critic who sets out to refute the legitimacy of a belief in individuality contradicts himself both in setting out at all and in every step he takes. He assumes the existence of other selves and himself and then proceeds, in terms of "I" and "you" and "they", to refute the reality of the Self. (2) The Self is indeed complex and growing. For selfhood or individuality is the progressive organization of the native capacities of a conscious organism into a more harmonious and richer unity of experience and deed. *The actual self is a self-organizing principle*. The materials of individuality are the congenital impulses of the organism. The patterns for the work to be done are the social types of conduct, thought, sentiment, character and trained capacity, which have been worked out by other socially creative selves in the history of human culture. The ultimate agent in the process of self-development or creation is the attentively selective, valuing, purposing, organizing mind of the individual. The more truly the natural self becomes a spiritual individual or personality, the more socialized and rational, the more self-dependent and creative it becomes. Thus the individual grows more and more into a self-determining, self-initiating unity. He ceases to be the mere creature of his environment and becomes in some part the transformer, the renewer and recreator of the physical and social environments. Instinctive crav-

ings and imperious desires become transformed into dynamic factors in the organized and harmonious life of the whole self. The nature of the self is thus revealed as it is "realized" or "actualized" in the fundamental and increasingly systematic development of its active attitudes, its valuations, choices, persistent purposes and deeds. The self is thus not a mere "phenomenal" flux or stream of passively determined feelings and ideas. It is not, on the other hand, an unchanging "substance" or entity unaffected by its aims, history and environment. *Selfhood or individuality has many degrees.* It is a complex, dynamic process always having some degree of unity in thought, feeling and purpose; and is capable of developing more unity and harmony under appropriate conditions.

(3) The Self is the product of the universe and the best clue to the nature of the whole. For the notions of *substance or permanence through change, of unity in multiplicity, of organization or systematic relation in a whole, of uniformity, intelligibility, coherence, of a purposive order and of individuality*—in short, all the fundamental notions, which man employs in the work of understanding and controlling nature, and so harmonizing himself with nature, by intelligent apprehension and rational mastery, are derived from the life of human society. Selfhood has as its original datum, its core, the inborn capacities and the dynamic principle of mental organization. But the full selfhood of the rational individual arises only in a highly developed social order. Every principle and instru-

ment of thought which man employs in interpreting the world is a product of social experience. *Uniformity, law, order, finality* — these are social categories. This does not mean that nature as an intelligible order is a creation out of nothing by human society. It does carry the implication that, since the intellectual tools by which man succeeds in understanding and controlling nature are of social origin, there must be a fundamental correspondence or harmony or organic interdependence of structure between nature and human nature. Kant said "the understanding makes nature". I would say "the social understanding and will make nature, because society is the highest product and value achieved in nature".

(4) The pathological disintegration of actual selves does not mean the absolute disintegration of the Self. In all these cases there is still a unity of selfhood. It is obscured and thwarted by nervous disintegration. The various selves or "persons" in such cases are not true selves or persons. They are relatively isolated clusters of impulses and ideas in an individual who has not achieved the integration of a full selfhood. Actual selfhood has all manner of degrees of organization of the congenital impulses to action.

(5) A considerable part of the life of selfhood is at any moment unconscious. Individuality includes much more than is in consciousness. It is an organized whole of many capacities. The questions involved in the relation of the conscious, the subconscious and the unconscious in mental life are

too complex to be discussed here. I must leave this matter with the warning that the admission of an unconscious psychical life by no means commits one to the recognition of a distinct subconscious self. The latter is a bit of mythology.¹

Since we have already found grounds for rejecting materialism, we hold that the Self is not identical with the nervous system. The mental self is, we have seen, intimately bound up with the central nervous system. The latter is the instrument by means of which the Self affects and is affected by the world. The mind is a power or system of powers, of memory, inhibition, selection, generalization, valuation and choice, by which the nervous responses are organized and made subservient to the enrichment, intensification, harmonization and conservation of the conscious life of the organism.

Dualism, as we have seen, leaves us with a mystery on our hands; psychological parallelism is a partial truth. The relation between mind and body is perhaps best stated as a duality of aspects with a unity of functioning.

In regard to the mental self, there is another matter of controversy to be considered. Which is more fundamental in the soul or mind, *intellect* or *will*, *thought* or *feeling* and *conation*? The *intellectualists* make intellect fundamental and the *voluntarists* make conation of prime importance. Descartes, Spinoza and Hegel would be classed as

¹ I have discussed this problem at length in my forthcoming book, "Personality and the World."

intellectualists; Kant, Fichte and Schopenhauer, as voluntarists. Voluntarism has been much in fashion lately largely due to the influence of Wundt. The whole controversy is a mistaken one. In man feeling, striving and thinking are equally congenital and fundamental. One can understand why an irrationalistic pessimist like Schopenhauer should tie up to an extreme voluntarism because it supported his ethical twist, but it is difficult to understand why one who without prejudice studies carefully the facts of human nature should not see that while man's impulses and instincts are indeed ineradicable and often imperious in their clamancy, they are the impulses, the conations of a being who is conscious of his surroundings and who frames images and concepts of his world and acts by their guidance. Intellect is itself a kind of conation; but, on the other hand, distinctively human volition is voluntary action incited and guided by, and culminating in, knowledge.

Probably the one-sided voluntarism of the present time is the consequence of the undue emphasis on man's biological inheritance and the resulting failure to distinguish between the character of instinct, impulse, emotion, the will-to-live and the will-to-power in man and in the animal world. Even the will-to-live and the will-to-power in their most ruthless, dangerous and ethically inhuman forms in human society are incited by ideas and guided to their accomplishment by thought.

I close with a few words on the relation between the concept of selfhood and freedom. Free-

dom of the will properly means freedom of the self, and this, in turn, means *self-determination*. The freedom that is implied in our conception of individuality is not that of unmotivated or capricious and irrational choice. Such a freedom, if possible, would have no moral worth for man. On the other hand, the nature of the Self, as a being that grows in rational and moral self-determination, implies that the self is not absolutely predetermined by its antecedent history. If the self be not the purely passive product of circumstances, it must have the capacity to free itself from the clutch of circumstance to the extent to which such freedom is involved in the fulfillment of its own rational nature. What the self wills at any moment is determinate, for it is the joint resultant of circumstances and that degree and manner of self-expression of individuality of which the self is, at that particular moment, capable.

But it does not follow that, in similar circumstances, in a future crisis, the self *must* choose as it did before. New and deeper or more rational aspects of the Self's individuality may come into play. The truth is, it appears to me, that in the moral life of man exactly the same situation does never twice occur. For at least the Self is not the same as it was and, in the infinite complexity of human life, the conditions subject to which choices and volitions are made must also be consequently varying in some degree.

The chief arguments advanced for *determinism*, by which I understand the view that human voli-

tions are, like all the processes in the universe, the unequivocal resultants of antecedent conditions, are as follows:

(1) The universality of causation. Human action, it is said, cannot be an exception to the rule that every event is the perfectly determinate result of equally determinate antecedents. To this argument the advocate of rational freedom replies that the final determining factor in voluntary or chosen action is just the conscious Self itself, which weighs, evaluates and chooses between possible actions in the light of an ideal standard.

(2) The actual continuity of character and conduct. The determinist points out that the better we know a person the more certainly can we predict how that person will act in given conditions. The individuality of a person is a determinate quantum. Moreover, he insists that our whole work of moral and intellectual education aims at building up a definite character, the type of character demanded by the structure and aims of the social order. He insists that the very notion of responsibility implies that the rational human individual is a being that can be counted on to act in specific ways corresponding to specific situations. He explains the functions of rewards and punishments, praise and blame, to be to produce the type of character that the educator, the parent, the judge, as the agents of the social group, or the group itself through its approvals and disapprovals, demands.

To these arguments the advocate of freedom replies as follows: He does not contest the fact of

continuity in character and conduct; but holds that the highest degree of continuity exists just where the self is most truly a rational self-determining individual, who has an *ideal* which he follows and who judges his own conduct in the light of that ideal. He argues that the aim of all social approval and disapproval, of all rewards and punishments, of all social inhibitions and incitements to the self, should be educative. But he holds that true education is education into responsible self-determination, that the highest aim of society should be to give opportunity for human beings to become more rational individuals, responsible to their own ideals. He holds that the highest type of society is that one which contains the largest proportion of persons who do not passively accept the current fashions in conduct and thought but who, actively and in the light of reflection, determine for themselves the right course of conduct. He insists that, in the case of punishment through the law, the offender should be treated as a responsible being who accepts the guilt as his own and who thus can actively participate in his own moral renovation. He argues that the individual is not to be treated by society as an animal capable of being trained to do its tricks. He argues that the highest type of human being is precisely one who feels keenly his own responsibilities as a self-determining agent. He argues further that the possibility of *self-initiated change* is a necessary postulate of the moral life.

It is evident that the real question at issue is this—has the normal self to any degree the power

of rational self-determination or is it the plastic creature of circumstances? If the self be the sort of reality whose characteristics I have sketched, this question may be answered in the affirmative.

The meaning of this view may, perhaps, be illustrated by considering the place of the conscious self in relation to the neural activities. The cerebral cortex is a very intricate system of nerve cells and connecting paths (neurones and dendrites). Because of its original plasticity new connections are constantly being made in it in the process of the education of the individual. The *sensory and the motor segments of the nervous system constitute, respectively, specific sets of native ways of perceiving and responding to stimuli*. Thus, the organism has native ways of reacting, both directly to stimuli that originate in the external environment, and indirectly, through the responses motivated by the inborn and persistent needs of the organism. The former are the direct reactions through the sensory system, through sight, hearing, touch, smell, et cetera; the latter are the congenital *instincts and impulses*. Without the intervention of reflective consciousness, without deliberation and choice, the human organism would respond in specific and complex ways, determined in part by the character of the external stimuli and in part by the character of its own native bodily organization and needs. The native ways of reacting to external stimuli and organic cravings with sensory experiences and movements are complex and modifiable. They may be tied up together in a variety of ways. The tying up is done in the brain.

What new factors do conscious experience, deliberation, valuation and choice introduce into the organism's reactions; in other words, what is the function of the conscious self? It delays responses. It builds up, in its system of ideas and purposes, a selective mechanism which shifts the emphasis, by attention and choice, on what shall be perceived and done. It generalizes from the perceptual and memory materials. It weighs and evaluates the results of possible actions. It forms, in short, a moving system of selective interests or aims, which originate in its own affectively colored judgments of value, as to what is most worth noting, remembering, seeking to avoid, to attain and to retain in its experiences. Delayed response is the condition of deliberation and choice. But the latter involves, further, a "throwing of the switches" in the cortex, a "loading of the dice," *motivated by the organization of interests, the systematization of values in perception and action, which is performed by conscious selfhood; which indeed constitutes the very essence of selfhood.* For, at its highest level, conscious individuality is an organization of attitudes or dispositions to act, to know and to feel, guided by reflection upon the values yielded by the various types of sensory and motor reactions which it has had in the past and may have in the present and future physical and social environments.

Rational freedom is nothing more than the actualization of the capacity to interpret, evaluate, and thus organize into an ideal or coherent system of purposes or values, the experiences which the

organism has and takes note of. But we must not forget that, at the center of these volitional experiences, are the individual's own experience of its *ideal strivings* and *valuations*, its demands for the fruition of its yearnings for inner harmony and inner growth, for social harmony and social progress, for comradeship and justice, for the progress of great human causes; in short, for "more life and fuller" of the sort that one means when one thinks of the fellowship of noble minds, endowed with sympathy for human kind and enkindled with the passion for the increase and spread of truth, beauty, justice and comradeship, participation in and service of which lift society and the individual out of the mire of sensualism, of selfishness, of a hardened and exclusive egoism, out of that static egohood which is the death of the soul.

It is the mission of philosophy to judge the possibilities of man in the light of the highest that man has lived and striven for. The philosopher who does not think nobly of the soul is no genuine philosopher. For, in a complex and changing world, an interpretation of its central factor which would read the meaning and destiny of the whole life of the spirit in man in the light of an arithmetical average is untrue to the meaning of the whole. Not the so-called "divine average" but the highest and rarest and most excellent that has been lived by men is the key to the meaning of spiritual individuality, of selfhood or personality in man.

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CHAPTER XXV

THE FUNDAMENTAL CONCEPTS OF METAPHYSICS

In this chapter I shall aim to gather up the threads which have been running through our study of the problems and theories of philosophy, in order that the reader may see that philosophy is ever engaged in weaving a logical tissue of symbols to interpret reality as an ordered whole or significant system. This is precisely the work of metaphysics, the heart of philosophy. In a more technical and fuller treatment, it would be one's duty to examine more critically this logical tissue of concepts. In this introductory study I shall be content with pointing out its general character.

The technical name used frequently to designate a fundamental concept of metaphysics is *category*. A category is a highly general and basic type of judgment, an affirmation or predication of a universal *meaning* or *relation* of reality. The categories are the principal or universal ways in which thought classifies and organizes the data of knowledge. Thus *likeness* and *unlikeness*, *identity* and *difference*, *quantity*, *quality*, *thinghood*, *substance*, *causality*, *finality*, *individuality*, *totality* and *order* are categories or forms for the relating of experiences and the organizing of our conceptions of reality. Aristotle was the first to give a table of categories. He enumerated Substance, Quantity,

Quality, Relation, Place, Time, Position, Possession, Action and Passion. Under the name of "relations" Locke and Hume discussed the subject and Kant gave what he regarded as a logically complete enumeration of categories — twelve in number as follows:¹—

1. <i>Quantity</i>	2. <i>Quality</i>
Unity	Reality
Plurality	Negation
Totality	Limitation
3. <i>Relation</i>	4. <i>Modality</i>
Inherence and Subsistence	Possibility — Impossibility
Causality and Dependence	Existence — Non-existence
Community	Necessity—Contingency

Hegel's *Logic* is a very elaborate attempt to organize the categories into a system. Among other interesting tables of categories are those by E. Von Hartmann and Charles Renouvier.

The full discussion of the categories could, of course, be undertaken only in an advanced treatise on metaphysics. Here I shall single out for comment only those categories which I regard as most fundamental.

¹ See Kant, *Critique of Pure Reason*, *Transcendental Analytic*, Book I, Chap. I, Sect. III and Chap. II and ff. Also the whole of Book II.

1. SUBSTANCE

Both historically and logically the first concept of philosophy is *substance*. The concept of substance means in philosophy chiefly two things:— (1) Substance is the *permanent principle* or *ground of changing things*; water for Thales, aether for Anaximenes, atoms for Democritus, ideas for Plato, forms for Aristotle, are the permanent or enduring realities; so too the spirits or selves of Berkeley, the monads of Leibnitz, the Absolute of Spinoza and Hegel; (2) the substantial is the *self-existent*, it is being which is not dependent on other being. Descartes seems an exception with his two substances, but he recognizes that these are not substances in the full sense of the term. They are not self-existent; neither are the finite monads of Leibnitz. The point at issue between Singularism and Pluralism is whether Substance is *one* or *many* independent beings. *Spiritualists* and *materialists* alike affirm that Substance is of *one kind*—spirit or matter; *dualists* affirm that there are *two kinds* of Substance. Thus one may be a *pluralistic* or a *singularistic monist* (either spiritualistic or materialistic) or a *dualist*. Or one may take the position that the two empirical realities—spirit and matter—are *dual aspects of one kind of being, Experience*. This latter view then means that reality is *psycho-physical*. One may hold this view of empirical reality and still hold that the empirical world, with its duality of aspects, is dependent on an ultimate Being which is best described as creative spirit.

It is clear from the course of our critical exposition that reality cannot consist of an unknowable substance that exists apart from or behind phenomenal existence. Since the only reality we know consists of what we experience plus what we logically infer from the nature of experience, *substantial reality can be only the systematic totality of all that is manifested and involved in experience.* The notion of Substance in its highest form is that of a sustaining and active principle of *order or systematic meaning*, manifested in the diversity of aspects and degrees of individuality and meaning which the world of experience shows.

I shall argue that the notion of an active and sustaining principle of order is implied in all the other concepts or categories of metaphysics. I mean by the active principle of order that the ground of the whole structure and course of reality is constituted by a principle which displays its character in the systematic or organized character of reality. Empirical reality does not consist either of one abstract being or of many atomistic beings. It consists of several kinds of individuals possessing many degrees of individuality and all forming an ordered whole or system.

2. CAUSALITY

In primitive thought no distinction is made between mechanical and finalistic or purposive causation. The distinction emerges in Greek atomism and in Plato, and is very clearly made by Aristotle. Modern philosophy largely revolves about the prob-

lem of the relations of mechanism and finality, as one of its main issues.

In common sense thinking a "cause" means a specific *force* or *power* which *produces* a specific result and it is assumed, in practical work and science, that the same force working under the same circumstances will always produce the same kind of an effect. This is the postulate of *the uniformity of nature*. Hume, in his famous critique of Causality, attacked the grounds on which this belief rests.¹ He argues that we cannot know anything of a necessary or absolutely uniform connection between specific causes and specific effects. A priori anything may produce anything, he says. All our reasonings concerning causes and effects have no other basis than this, that having observed a number of times that similar events $C_1, C_2, C_3 \dots C_n$ are immediately followed by similar events $E_1, E_2, E_3 \dots E_n$, we jump to the conclusion that there is an invariable or necessary connection between C and E. Our belief in causation is thus "a determination of the mind". As a matter of fact, says Hume, all we have to base this belief on is the repetition of a number of similar cases which, by virtue of the psychological laws of association, by resemblance and contiguity and succession, generate the belief in a necessary connection. We have no rational grounds for denying that the next C may be followed by X. Moreover, he argues, we can form no picture or concep-

¹ Hume, *Treatise of Human Nature*, Book I, Part III, Sections 1, 2, 3, 10, 14, etc. Also his *Enquiry*, Section IV.

tion of *how* the cause produces the effect. We simply *see* that the movement of one billiard ball is followed by that of another ball. We simply *feel* that a volition is followed by a muscular movement. We know nothing about the inner "go" of the process in either case. All our beliefs in causal connections are the results of *mental habits* or *customs due to association of ideas*.

Kant answered Hume with the argument that we do distinguish between *causal* or *irreversible* sequences, which imply necessary connection, and non-causal sequences, which are accidental. We say that heat is the cause of motion but we do not say that night is the cause of day. To which Hume might reply that the reason is that night and day alternate. Kant admits that, in particular cases, our belief in causal connection is based on the observation of repeated empirical sequences of similar events, but he insists that the distinction which is made between causal and non-causal sequences implies that there is in the mind a *native rule* or principle of causal relationship not derived from, but read into, the sequence of sense-impressions. The causal relation is a necessary way in which the mind connects certain sequences in experience.

Since Kant the causal principle has been subjected to acute criticism on the ground that change is a continuous process, whereas our separation of events into causes and effects is arbitrary and due simply to our practical interests. In a temporally continuous series we cannot say when the cause ceases and the effect begins. For, if any empty

time elapses between the two, causation is an unmeaning miracle. Since no time elapses and the full presence of causal conditions is simultaneously the effect, the temporal distinction between cause and effect is arbitrary. Moreover, what we single out as causes and effects in any given process of change are only particular features in an infinitely complex network of relationships. Therefore, it is said, causal explanation is only a useful fiction in science; and, from the standpoint of philosophy, it disappears in the idea that all sequences of events are but appearances of one complete, timeless reality. Strictly speaking the cause of any event is the total state of the world at that very moment. (*mel*)

Let us take up the latter point first. Admitting that, in our causal explanations, we arbitrarily isolate and give prominence to certain aspects of the order of change which may interest us as physicists, biologists, lawyers, doctors or educators, and neglect many other features of the process which are not relevant to our special purposes, it does not follow that real causal changes do not take place in the world. Such an assumption deprives our whole experience, which is temporal, of meaning and reality. I do not see what would then be left to philosophize about. We may admit that reality consists of a vast complex of interrelated and interacting centers of force whose entire network of causal relationships we shall never fully uncover. But things are really done and suffered in our world,

and we have a right to hold that our temporal world is real until we are given a better one.

It is true also that in many cases we cannot picture or conceive *how* changes are produced. But scientific analysis and the constructive imagination, working upon the results of this analysis, do succeed in giving us good working models of how many things go. The molecular theory of gases, the electro-magnetic theory of light, the atomic theory of matter, bio-chemical theories and many other scientific theories that might be cited, aim at giving us pictures of how changes go on beyond the range of our crude perceptions. Any one of these theories, as it now is, may tomorrow be thrown away for a more plausible one, but the fact remains that we make *better models* as time goes on, and learn more about the "how" of causal changes. If it be said that science knows nothing of efficient causes or *forces*, I would point, in reply, to the constant use of theories of force and energy in science. Since we are conscious of activity, feel effort when we move things and change things in the world, we cannot help believing that every change in nature results from the interaction of force-centers. Any science or philosophy which denies or ignores this basic fact of experience is thus far untrue to our common experience.

As to the necessity of causal relations, it is true that in many cases the observed repetition of resembling instances is the only basis we have for a belief in uniformity. There may be no exact repetitions in the course of the universe. But Hume

ignored the fact that a few instances or even one case, *experimentally tested*, may be sufficient to establish a causal connection, especially if the relation can be reduced to mathematical determination.

The quest for causal connections is a native principle of the human intellect. It is a higher form of the same demand for order or interrelatedness and system, for a conceptual or intelligible relevancy of one thing to another in the changes that take place in the experienced world, which we have met in doctrines of Substance. The human mind is so constituted that it must seek grounds for every change in the orderly relations or systematic relevancies of the single changes and the single thing which changes to other events and things. The principle of causality, when thought out, is thus seen to be a form of the mind's postulation of the world-process as a whole of interacting and interpatient elements, in other words as a connected totality, a system of interrelated elements, a rational system or order.

3. FINALITY AND INDIVIDUALITY

The concept of *finality* or *teleological activity* cannot be discussed apart from that of *individuality*. *End* or *purpose* implies individuals *by* whom ends are sought and *in* whom they are achieved. In its fuller form, it implies individuals *for* whom these ends are present as *values*. Hence the belief in the purposiveness of any part of reality implies that individuals are there effective agents. The belief in the purposiveness of the *whole* of reality implies

that there is either one supreme individual or a society of individuals whose ends prevail, whose values endure, in the order of reality.

By individuality in this connection we mean more than the individuality of a single self. For a society, such as a college, a church, a nation, even an epoch of human civilization, has its common or supreme purpose which controls the purposes of the individual selves who are its constituent elements. These common purposes are more fully, clearly and unqualifiedly represented by some individual members of the group than by others. But they influence all the members. At the present time, for instance, England, France, Italy, and the United States each have aims and purposes in the great war which are being organized into a supernational unity of purpose which, if achieved, will probably determine, to a large extent, the future course of civilization.

Individuality may be defined as an organized and effective unity of interests and purposes. A lesser or poorer individuality may be, indeed must be, an element, more or less harmonious or obstructive, in the unity of a richer and more comprehensive individuality or spiritual totality.

The relationships of common feeling and thought, of common purpose, value and volition, by which persons or elementary moral individualities are organized into societies, are of a higher order than those which obtain in the causal interaction of a physical system. Hence the notion of *order*, that is, of *coherent relationship among members of*

a whole or system, is more richly and more adequately embodied in a society of selves than in a physical system. A society of persons is at once a richer, more comprehensive whole and one with more capacity for development than a mechanical system. It is a spiritual system.

In a more technical and fuller treatment of these theories, it would be in place to show in detail what I only suggest here, that the best analogy from which to interpret the unity and order of the universe is that of a society of rational selves.

4. ORDER, LAW, RELATION AND INDIVIDUALITY

Thought is concerned with the natures of concrete beings and their relations. Whether it be in practical life, or in a special science, or in philosophy, there are always two aspects to the work of reflective knowing: (a) What are the characteristics of the individual beings, the "thises", which are the elementary data of the problem, and what are the significant relations between these individual beings? Philosophy generalizes this twofold problem, in order to determine what are the distinctive types and ranks of individualities in the world and what are the correspondingly distinctive types and ranks of relationships between them. Are all individuals and all relations reducible to a common type, and is this common type the lowest or simplest type that is found? My answer to both these questions, dogmatically stated, is that all individuals and relationships are not reducible to a lowest common type and that the higher types are

not explained by the lower, but that the higher types of individuals and relations more nearly furnish an adequate principle of interpretation for the whole than do the lower.

Let us designate the individual or elementary datum (the *haecceitas* of Duns Scotus) by the general names of *individuum* or *monad*. Then in any science the single member is the monad. In chemistry it is the molecule, in physics the atom or electron, in biology the cell and in the social sciences the self. The principles or laws of these sciences are economic generalizations of the types of relationship which obtain between the individua or monads whose characteristics and relationships are studied by the various types of science. The endless series of whole numbers, for example, has its perfectly definite laws of operation. The molecular monads of chemistry have their laws of valency and atomic weight. The physical monads have their mathematically statable laws. The relations of human selves in society have their economic, physical, psychological, moral and spiritual laws of relationships.

But we say, rightly, that laws are abstract and, especially in the case of the more complex monads, such as living cells and still more emphatically in the case of selves, laws are only approximately correct statements of the relationships of the individua. For example, the statistical averages in regard to murders, suicides or marriages in any given population, tell us very little in regard to what any given human individual may do. "By lawfulness we mean

a character which is generally viewed as belonging, not to individuals or to collections of individuals, but to the general modes of behavior, the general qualities, characters or relations which nature follows, which we regard as belonging to the real world, — or our world of thought or of conduct.”¹ In short, laws, whether natural, civil or ethical, leave out of account many of the concrete characteristics of actual individua or monads. A law of nature is an abstract, universal statement of how certain types of individua, who exist in the natural order, do actually behave. A civil law or an ethical rule is an abstract, universal statement of how members of the social order must or should behave.

“There is a natural order and there is a spiritual order,” says St. Paul, and we may add to this saying the remark that, within both the natural and the spiritual orders, there are various subordinate types and ranks of order. There is a logical order, a physical order and a vital order. There are various types and ranks of social order; the order of public law, orders of economic relationships, the orders of family affection, friendship, neighborliness, patriotism, and general human sympathy.

It is thus impossible to discuss individuality, relationship, cause, purpose, or law, without making use of the notion of *order*. Therefore this notion of order is fundamental to all science and philos-

¹ Royce's article on *Order* in *Encyclopedia of Religion and Ethics*.

ophy. *Indeed the correlative notions of order and individuality are the two most fundamental notions of human thought and of the whole realm of reality.* Each in his own order, the individual or monad is the datum, and the law is but the abstract statement of the orderly relations of individuals in a system or society. There are as many types of order in reality as there are types of individual and these types of ordered individuals may, in turn, be constituents in the universal type of order which, we may suppose, is ever being realized.

One cannot conceive an individual except as a member of one or more orders, and the more orders he has membership in, the richer his individuality, provided he does not dissipate his selfhood in a multitude of relationships too numerous and varied for him actively to participate in. The "joiner" of clubs and associations may indeed join too many. The human self is a member of the physical, the vital and various social and ethical orders or systems of relationships. For an order means a systematic relationship that obtains or should obtain between individuals. As Royce says, order belongs to sets of individuals, to collections, to arrays of things, persons, deeds or events.

The orders of the poorest types of individua, such as numbers, points, lines, atoms and electrons, are simple and definable in very precise or mathematical terms. The orders of vital individua or organisms are more complex and not definable in such abstract and simple terms. The orders in

which human selves live, behave and feel are very much more complex and richer.

It is very significant that *Cosmos*, the Greek word for world, means order, and one of the principal meanings of our English word *world* is the totality of an ordered or harmonious system. Any order or system means a totality of elements or individua that are interrelated organically, that are functionally interdependent members of the whole. This does not imply that the mere order or system of relations completely determines the nature or character of the individual members. The members of a system or order are such in the orderly relations which constitute the system. On the other hand, the character of the relations are determined by the natures of the members. In short, the natures of the members and the relations of order which constitute them members of the system are reciprocal or interdependent. It is a case of completely organic or better still, with reference to social orders, *organized totality*. Coherence, harmony and order are various names for this organizational or functional interdependence of individua.

For example, the members of a numerical series, such as the ordinal series of whole numbers, are defined by their positions in the series and, in turn, the serial character of the order grows out of the nature of the whole numbers. The cell members of an organism constitute a more complex type of order or system, that is, one whose individual members have more complication of nature and

consequently one whose order is not so simple. The members of a social group such as a family, a college, a nation or a church, are still richer in their individual natures and, consequently, the social order is more complex and significant than any lower order.

Metaphysics has the task of classifying the various types of order and ordering them into an *order of orders*, a totality in which each subordinate order is given its due place, a living system into which all partial systems are integrated. The postulate common to the practical ordering activities of man in society and to science and to metaphysics, is that there is one all-unifying type of order, an ultimate principle of order into which all other orders may be fitted. *Not* that the world is subject to law, *but that it is an orderly whole* is the fundamental assumption of intelligence.

From this standpoint we can see, as Bergson so well points out, that what is called disorder exists only from some partial or practical point of view and that, in the last analysis, a disorder can only mean a different or strange (to us), type of order. For example, I leave my study in order. My small boy comes in and I return to find it in what I call disorder, but from his standpoint it is a higher order.

Inasmuch as individuals and groups of individuals have conflicting interests and purposes, the types of social order to which they adhere come into conflict. The problem as to whether all finite types of order can be regarded as subordinate to

one universal principle of order is another form of the problem as to whether there can be said to be a Universal Purpose or Meaning, to which all lesser purposes are tributary or in which they are taken up as elements. The problem is obviously that of Singularism and Pluralism stated in different terms. I suggest that the notion of a universal society or order of selves which has, as its Principle and Ideal, a Representative or Supreme Self, in which the meaning or order of the whole society is typified, will probably prove to be the conception which will most fully satisfy all the interests at stake in this matter.

It is very significant, in this connection, to note that the study of the evolution of human thought in regard to the Cosmos and in regard to the organization of the human social order shows that the former reflects the latter. Hegel pointed out, in his *Philosophy of History* and *Philosophy of Religion*, that the religious beliefs of a people and their philosophies reflect the character of their social organization. In a despotic empire, God is a despotic monarch. In the Greek states the Olympian gods are a society of free individuals, each with his special province or domain and constituting a social order. In Israel Jahweh was the accepted ruler of the social order. In Christian England, God is a constitutional monarch. In John Calvin's autocratic republic of Geneva, God was an austere sovereign. In a democracy God would be the permanent President administering the moral order of

society. M. Durkheim has shown very clearly,¹ what many works on ethnology testify to, that in primitive types of society the conception of the Cosmos reflects more naively the organization of the tribe. For instance, the Pueblos have seven constituent clans and there are seven cardinal points in the Cosmos. Certain Australian tribes have four social groups and there are four cardinal points in their Cosmos.

On the other hand, novel conceptions of the universal order modify social organization. The Christian doctrine of a new social order of which God is the pattern and type, the ideal and guardian, has been one of the chief sources of the modern movement towards democracy.

5. SPACE AND TIME

Space and Time are such universal features of experience that they cannot be passed over in this connection, although an adequate discussion of the metaphysical problems involved is not in place here.

All physical objects of experience are placed in Space and have spatial relations. Indeed, the minimal definition of a *body* is that it occupies space and resists the occupation of the same space by any other body. The physical concepts of inertia and mass are derived from this basic fact. Inasmuch as inertia and mass vary greatly, the physicist is rightly led to the view that space-occu-

¹ See his *Elementary Forms of the Religious Life*.

pancy means that centers of force are distributed in nature in very varied degrees of "thickness" or nearness and remoteness from one another. The molecules of a solid are closely packed together, those of a liquid are farther apart and those of a gas still farther apart. What then is the space in which these various relative positions obtain? It cannot well be a *vessel* which contains them, and which would be the same empty as full of molecules. And yet space seems to have a constancy of dimensions, whether molecules are thinly scattered or thickly packed in it. The physicist is apt to invoke a space-filling ether, in which molecules are regarded as deformations and by means of which they act on one another. But this ether is only another name for the fact that physical objects interact. I suggest that real space means the three-ply order of simultaneous existence or co-existence and interaction of force-centers as perceived by human beings. From this standpoint space is not something in itself. It is our perception of the order in which things interact and, if the physical world is made up of a vast system of interacting force-centers, then space is the way in which we perceive *en masse* parts of this system. Space thus would be, not a substance, but an attribute or quality of the real physical world. It means a type of order that belongs to all the parts of the physical world *as the latter is perceived*.

Interesting questions arise as to the relation between the space of experience or perceptual space and mathematical space, including the various con-

ceptions of non-Euclidian space. Into these questions we cannot enter here. It may be in place to point out that the rather prevalent notion that to make a distinction between *perceptual* and *conceptual* space will enable us to solve all the problems of space is a mistake. For all conceptual spaces, those of mechanics, Euclidian geometry and non-Euclidian geometries, are derived by abstraction and intellectual construction from perceptual space. These conceptual spaces are not real apart from the mind which constructs them. The space that is physically real must be an extension or modification of perceptual space.

All human experience and all volition is temporal. Every event is related to every other event either as contemporaneous, before or after. Event B may be wholly or partly contemporaneous with event X, partly or wholly after A, partly or wholly before C. *Time then is the complex relation or order of succession between events.* Time would not be recognized unless some things changed in our experiences while some things remained permanent. This does not imply that anything is necessarily absolutely permanent, *except the orderly succession of events.* The temporal order is an *irreversible series of events.* But it would not be a series and there would be no time-consciousness, unless there were an orderly sequence or succession. The notion of time arises from our conscious noting of succession or orderly change, but we apply this notion, by means of recurring or rhythmic motions in space, an hour glass, a pendulum, the earth's

rotation and its movement around the sun, to arrange and date events in an objective temporal or historical order. Inasmuch as we can correlate changes in our own experiences as individuals and social groups with the physical changes and rhythms in the external world, we are led, rightly, to believe in an objective time order, in which the temporal order of individuals, the histories of societies and living species and even the histories of stellar systems, are elements.

We cannot think of the whole spatial order as having bounds, since it could not be bounded except by another and larger space-whole which contained it. On the other hand, if the universe is *in* boundless space, it is not a complete totality. Similarly, we cannot think time as having either an absolute beginning or an absolute ending, for beginnings and endings are relative to the events before and after them. And yet there seem to be new beginnings, new beings, new acts in the *time order*. If it were not so the universe would have no history; for, without changes or novelties, there would arise no thought of history, no idea of continuity or permanence. How can we solve these paradoxes?

Kant proposed a very simple solution. He assumed that space and time were forms of human perception. Constituted as it is, the race of man cannot help perceiving things in space and time. But things-in-themselves, that is, the ultimate reality, may not be in space or time. God and the soul may really be spaceless and timeless. In fact Kant finally concludes that they must be.

Kant's solution is too simple. Since we human beings live and work with fair success in a world which has spatial and temporal order, it seems impossible to conceive, in an intelligible fashion, the nature of a so-called "real" world that had no spatial or temporal qualities.

Perhaps the solution of the difficulties here may be found in the following direction. The spatial order is real, but relative to our positions and relations as finite beings. From the point of view of the absolute totality or unity of the real, this order would appear only as the order of relations among the several finite members of the whole system of reality. The temporal order is real, since it is an order which involves permanence; in other words, since we cannot think succession as an order, or indeed at all, without reference to the notion of a permanence, at least of order or law or meaning holding through change, there may be an absolutely permanent reality, one that is *trans-temporal* in the sense of enduring through all time.

Since a complete whole or totality of being implies a permanent order, the notion of perduration in time is more fundamental than that of spatial order. And since the notion of a permanent order involves time, and time means an order-in-experience, the only satisfactory conception that I can frame of an order that endures through time is that of the conscious life of a universal society which has its ground in a permanent selfhood, an enduring spirit for whom all temporal orders exist, in whose total and self-active experience all finite

"nows" or "presents" are sustained and unified. If the universe be a universe it must be a systematic or ordered whole of structure and meaning or purpose. The ground of such an order of meaning and purpose must be a Universal Life, an active experiencing centre or unity.

The above remarks are intended simply as hints to the student as to the importance and difficulty of these problems and the directions in which we might work for their clarification.

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CHAPTER XXVI

EPISTEMOLOGY

All the principal theories of knowledge have been already discussed. It is indeed impossible to discuss systematically theories of reality or the theories of the great philosophers without going into epistemological questions. In the historical introduction it was pointed out that the problem of knowledge was definitely raised and discussed by Plato and, indeed, we find more or less fragmentary theories of knowledge before Plato. At this point we wish to get a summary view of the principal problems of knowledge and of the principal answers to these problems. It will be my aim systematically to gather together the discussions and the points of view as to the nature, structure and function of knowledge that have been scattered through our previous discussions.

In modern epistemology there are three chief problems. These of course cannot be absolutely separated. No principal problem of knowledge can be thus separated from the other chief problems. In philosophy our quest is for a unified conception of reality. One's standpoint on any one of these problems of knowledge will determine largely, if not entirely, his standpoint on the other problems. For emphasis, however, it is possible to distinguish between these problems. The three problems are the following: —

- (1) What are the sources of knowledge—whence is our knowledge derived?
- (2) What is the place of knowledge in the world of being—what is the relation of cognition to reality?
- (3) What are the norms, the criteria, the standards of knowledge?

1. PROBLEM OF THE SOURCES OF KNOWLEDGE.

From the beginning of modern philosophy down to the present time, one finds two antithetical views as to the sources of knowledge, namely, *empiricism* and *rationalism*.

Empiricism is predominantly a British tradition in philosophy. We find its beginnings in some of the nominalists of the Middle Ages and it then moves forward, with ever increasing momentum, through Francis Bacon, Hobbes, Locke, Hume, J. S. Mill, and others. The central thesis of this movement is that all knowledge is derived from *sense experience*. Locke, for example, while not an out and out empiricist, in that he admits that there are certain kinds of knowledge arrived at by reflection, says that there are two chief sources of knowledge, viz., ideas of sense and ideas of reflection. Hume, who is a thoroughgoing empiricist, has a different terminology from Locke. Hume calls Locke's "ideas of sense" "impressions," and uses the term "ideas" to designate copies or traces of sense impressions in the mind. All ideas are derived from sense impressions for Hume. These men, save to the extent that Locke is a rationalist, regard the

mind as a sort of wax tablet or sheet of paper on which impressions are made. The mind is but a name for the records made by the sequences of impressions. Impressions are made on the mind and thus the mind is modified. We must be careful to note, however, that there is no substance-mind for Hume. For him, at least, mind is only the tied-up succession of impressions. Mind is only the processions of ideas and impressions.¹

Where do these impressions come from? Hume's answer virtually is, "I don't know". "I feel", he says in effect, "only a constant succession of impressions and ideas". Nowhere can Hume find a substantial mind. As to the modes whereby these successions get tied together, Hume says that this is accomplished by means of such psychological laws as association by contiguity, resemblance and succession. It is by means of these laws that ideas get married. The fact that you have had two impressions contiguous and immediately succeeding one another leads an impression or idea similar to one to call up the other. Hume says that all our knowledge is built up in these ways from impressions which are connected up by means of these laws of association. We had better not say *we have* impressions and copies since there is no self; it would be truer to say *there are* impressions and these mysteriously engender copies which get associated in a variety of ways.

¹ William James has a better way of stating how ideas are connected. He calls the connection "the unity of the passing thought."

The idea of causation, which was the central difficulty for Hume, and which Kant later generalized in such a way as to show that it is but one of the many types of synthetic a priori connections, is derived, says Hume, from the repeated succession of our impressions. If it is noticed that A is always followed by B, there is soon formed the habit of expecting, of looking for B whenever we see A. All we mean by causation is that there have been in a number of cases similar sequences of impressions. If, for example, A is followed by B and A₂ by B₂, and so on, then if we ever perceive A_n we shall of course expect, through the force of this habit, that B_n will follow. Causation is the name of a habit engendered by such a repetition of resembling sequences of impressions. For the pure empiricist, the mind is either *wholly passive* or it is *nothing at all*. Knowledge consists of the repeated association, in various ways, of sense impressions and copies of sense impressions. We can, according to empiricism, account for images and concepts and for their modes of association, but we remain absolutely mute when we try to give an account of the source of the original perceptual knowledge.

The rationalist maintains that true knowledge is derived from thought itself, from the *activity of reason*. He believes that the characteristic of knowledge which is called truth is a function of its power to constitute a totality. The highest kind of knowledge consists in universally valid propositions that are consistent with one another. Sense

experience does not give us propositions which are universally valid or mutually consistent. By the great philosophers of Greece and such modern philosophers as Descartes, Spinoza, Leibnitz, Kant, Hegel and all the later idealists after Hegel, this claim of the inability of sense experience to give us universally valid thought connections is reiterated. From sense perception, say the rationalists, we can get only a number of particular cases. The cases may, to be sure, be similar to one another but we never get universally valid linkages of thought. Now, our sense experience is full of inconsistencies and discrepancies, and the rationalist maintains that, when we examine these inconsistencies and discrepancies in sense perception, we find them to be due to the imperfect activity of thought. Knowledge for the rationalist is more than a connection of experiences by passive repetition and association and by emotionally engendered beliefs. Reasoning is a process of actively relating and classifying our experiences, but this may be done so hastily that sufficient scrutiny is not exercised to avoid error. We may correct error under the guidance of certain innate or a priori, fundamental laws of thought. In this way the very principles that we employ in organizing our experiences have a different source from our sense impressions. I cannot rest satisfied in a contradiction. My intellectual structure is such that I cannot rest at such a point. My rational nature demands consistency. Two contradictory propositions cannot be true simultaneously and if one denies this he virtually denies the possi-

bility of science. He negates the very nature of reason.

Our ordinary sense experience, as interpreted under the influence of tradition and feeling, gives us many contradictory propositions. Of these we say that there must be something wrong, that the experiences can not have been taken in their right relations. In order to think scientifically we are obliged to accept the validity and authority of the laws of thought. The first of these laws is called the *Principle of Identity*. It means that in any discussion that is to get anywhere we must stick to our definitions. Its objects must have certain *invariant characteristics* if thought is to continue. Another of these fundamental principles is called the *Law of Contradiction*—two contradictory propositions cannot both be true simultaneously. These principles, together with others which Logic formulates, are the presuppositionless or ultimate bases of all valid thinking. In regard to all the other sciences, we find that they rest upon certain logical presuppositions. There is always some atlas upon which the group of order series which constitutes any particular science rests. But at this point in the discussion of the theory of knowledge we come upon a unique situation. The presuppositions of knowledge are the logical principles which guide and control the mind in its entire quest for knowledge.

Another of these ultimate logical principles is that of the Causal Category or *Principle of Sufficient Ground*. Why does one always look for causal rela-

tions? We say that nothing can happen without a sufficient cause or ground. This attitude seems to be native to the mind. We are not satisfied with saying that things just happen. We look diligently for causes. Many of us are uneasy until we find out the how and the why of happenings. We distinguish between causal sequences and those that are not causal. Of the latter, the sequence of day and night may be taken as an illustration. The causal series differs from the non-causal in that the former is an irreversible series. We may agree with the empiricist that the specific aspects of any given causal sequence are in all particular cases dependent upon empirical data. But the empiricist fails to account for the native propensity of the mind insistently to demand the causal grounds of every event. *Thus the mind seems to have certain specific native ways of operation*, and in Logic we study these ways. The whole subject matter of Logic is the study of the structure of human reason. The empiricist is evidently right in saying that the data of knowledge are found in experience, and no reasonable rationalist will deny that postulate, but he insists that the data do not fashion the tools by which knowledge is made. Indeed, Kant emphatically asserted that there could be no knowledge without empirical data and became agnostic only at the points where such empirical data are not present. Empiricism has a tendency to confine experience to what we perceive through the outer senses, but in doing so it overlooks the fact that we have a large framework of affectional, moral, social and logical

context. It is this that empiricism seems perennially to overlook.

The position that I take is called *teleological idealism*. Such a point of view makes an organic synthesis of the valid claims of both rationalism and empiricism. From this standpoint we explicitly hold that the materials of knowledge come to us in experience, but the materials thus given are organized by the activity of reason into the texture of our sciences. This native capacity of the reason is not to be interpreted, as many interpret Plato and other historic rationalists, as being a body of categories which have come into existence independently of the creative or synthetic processes of experience. The universal principles of knowledge are the mind's fundamental ways of working as these develop in and through the organization of experience.

Thoroughgoing empiricism is *nominalistic*. Concepts and universals, which are the chief tools of science, are from this standpoint nothing but signs or symbols, and it is impossible to determine with any degree of accuracy what the relation is that subsists between the symbols and the thing symbolized. The thing signified or symbolized is not a matter of experience, consequently our concepts and universals are subjective formations; they are names for relations which arise in the mind between ideas. Hume, who is one of the most instructive figures in the history of philosophy because he worked out the logical consequences of empiricism, argued that the only kind of knowledge that has

any certainty is mathematics. Now this certainty is due to the fact that mathematics deals only with relations between ideas. Such relations as these of identity, difference, magnitude and degree have to do only with the comparison of ideas with one another. Yet Hume is constrained to say that even in mathematics the oftener we run over a proof the more certain of it do we become. Repetition of similar experiences is the test of truth. Thus empiricism is not just to the character of mathematics. Mathematics does not deal with existence theorems. It is not concerned with the existence of points, lines, circles, et cetera, in nature. Indeed it abstracts even from the relation of mathematical space to the space of perception. Pure mathematics deals with ideal constructions. Thus far Hume is correct, but the validity of a mathematical theorem is in no wise dependent on the frequency of our running over the proof. In the last generation the science of mathematics has been very largely reconstructed by the discovery and the elaboration of more rigorous methods of proof. Keen, critical minds equipped with a passion for certitude have discovered flaws even in Euclid. Minds, in the highest degree equipped with the rational structure of which I spoke above, have criticised and discovered flaws in certain mathematical demonstrations which had been supposed to be irrefutable. But these more rigorous methods of proof have not increased in rigor merely by being repeated many times by many persons.

There is another difficulty with the empirical attitude. Granted that mathematics deals, not with existence, but with relations of ideas connected by reason, we are justified in saying that mathematics is an invention. We must say that it is a product not of the senses but of the reason. But mathematics applies to the world in which we live. The triumph of the modern mechanical theory of nature is due to the faith its authors had that nature is a kind of crystallized mathematics. It is small wonder that Galileo and others called mathematics divine — "What we can measure we can know." Mathematics works. It works in its application to past experience, to present experience and further, to possible experience. The predictive power of mathematical science is great. Take this illustration. In 1843 two astronomers made a calculation, based upon the deviation of the *observed* path of the planet Uranus from the path it should describe in view of the relations, the relative points and motions of the planets known by observation to exist. The path of Uranus as calculated from the observed relations of the recorded planets should have been of a certain character. The observed path, however, was aberrant. In view of this, what did the mathematical astronomers do? The astronomer said, "there must be an hitherto unobserved planet" and he calculated the locus of this planet. At Berlin the royal astronomer heeded the order of the astronomers in question and looked as he was told for the planet and lo, it was there. This is only one of the evident cases of prediction. The

more science develops by so much the more do we have cases of this kind. Let me note as a curious fact that Hume, who says that the whole idea of causation is a mere result of habit, presupposes the very idea he seeks to explain, inasmuch as he is already seeking a cause for the origin of our belief in causation.

Rationalism is *realistic*. It is realistic in that it regards universals and other relations as facts that the mind discovers by the use of its fundamental ways of working. Reality has rational order, texture, coherence; it is not chaotic, and it is because of this doctrine as to the texture of reality that rationalistic realism finds a place for science, whereas for nominalism science is but a set of subjective symbols of an unknown reality. Science is objective in its application.

Kant, though he answered Hume, never freed himself completely from the influence of empiricism. He said that the materials of knowledge come into the mind as a chaotic manifold and that mind, through its synthetic organizing power, arranges this chaotic mass into the ordered whole which we call the world. The mind *puts* the relations into nature. This view is an inconsistent one, for, if mind puts the relations into nature, then the world is the fabrication of our own powers and we are not delivered from subjectivity.

Later idealists start from Kant's view that mind is an organizing principle, and they hold that the successful working of the mind in the world shows that the environment has an intelligible

texture. This is what objective idealism teaches. It is not that we know only ideas as Berkeley argued, but it is the fact that we are analyzing the nature of mind and finding that it has this structure, which also has its correlate in nature, that gives efficacy to mind. Mind is an effective part of the world. In short, mind is at home in the world.

Wm. James, who partially misunderstood rationalism, and was at the same time rightly dissatisfied with empiricism, called his view *radical empiricism*. It is pure mythology, he says, to argue that all that comes to the mind is mere *dissecta membra*. We cannot put our finger on any disconnected item of experience. Every item is related. The minimum of experience at least involves the relating implied in the answer to such a question as, "what is that?" The mind starts out with its classificatory tentacles, its incipient universals. We are everlastingly propounding the question "what does this fact *mean*?" and thus we start on the endless process of relating data. There is no such thing as an unrelated datum of sense. Psychologists are now agreed that there are no such things as pure sensations. James misunderstood rationalism in so far as he thought that it is one of the cardinal doctrines of this view to suppose that mind comes down from above, as it were, and puts relations into the data in an external fashion. James, in his doctrine of a "pure experience" free from the distinctions and relations which thought makes, overlooked the fact that it is impossible for us to have mere sensations, although, in other passages, he

recognizes that there are no *pure* sensations. He seems to have held that this so-called pure experience is the reality which thought distorts and disfigures. The truth is the mind is always active and all that comes to mind is related. The meaning of this is that our world has an intelligible, rational, texture or structure.

2. KNOWLEDGE AND REALITY

We have already discussed incidentally the place of knowing in reality. It now remains to gather up briefly these suggestions into a systematic view.

The simplest answer to the query, what is the relation of cognition to reality? is called *naïve* or *presentational realism*. This is the view of the common man (that horrible example), the person who has not thought of this problem. He is naïve; for him there is no distinction between mind and the object of mind. For him mind is at one with its object. The object known and the knowing process are numerically and qualitatively identical.

This position is untenable. No two of us in this classroom see this table before me in the same way. Your perception is a function of your position, of light, shade, of movements and of infinite other variations. In fact your perception is a function of your sense organs, of your perceptors as these are determined by your mental habits and interests. From Zeno down the skeptics have been pointing out arguments that show the duality of the knowing mind and the known objects.

One remove from naive is *representational realism*. The stock example of this point of view is John Locke. This view admits the validity of the criticism just made of naive realism, and so this view starts from the existence of images and mental conceptions and says that we know only our ideas. Our ideas are representations, copies, symbols, of the real things.

It is quite true that representation does play a considerable part in our knowledge. In response to my request, you describe the State House. In doing so you call up images of the State House. Your idea is a kind of representation, replica or copy; but how do we settle whether the description you give is a copy? We appeal to the fact. The fact confirms or rejects the copy. If we take, however, the copy view on all fours, we never get anything but ideas. Then how can we settle, how can we ever agree? Representational realism is only a half-way mansion; we cannot stay at this place. Any man that thinks must pack up his tent and move on to some more substantial city. One more remove is the position known as *phenomenalistic realism* or *idealism*.¹ Ernst Mach, Karl Pearson and in part Immanuel Kant are representatives of this position. These men assert that we do not know reality. We cannot tell to what extent, if indeed to any at all, our ideas truly represent reality. The really real things forever retreat up the spiral stairway of

¹ Improperly so-called. It should be called *phenomenalistic psychologism* or *ideaism*. This is Hume's position.

reality. We reach out our conceptual tentacles to make a seizure into reality, but we remain in the veil. Between us and reality there is a wall of partition which not even the Allies can demolish. We do not know reality.

Herbert Spencer too has contributed to the teaching of phenomenalism. He calls his position *transfigured realism*. In our knowing reality, he says, we transfigure it; it becomes in the knowledge context something quite different from what it is outside the knowledge relation. The knowledge relation does not bring us into touch with reality as it is. Yet Herbert Spencer is convinced that there is a reality, and that this reality is an infinite and eternal energy from which all things proceed.

Let me briefly indicate two difficulties in this view: (a) Knowledge works in the world. In the only world with which we have anything to do, we find that knowledge does function effectively, and we further find that the increasing success of knowledge is due to the fact that we have analyzed and systematized our experiences. Errors are half truths. Illusions are experiences wrongly interpreted, set in the wrong relations, in the wrong context, and the distinction between the knowledge of phenomena and the knowledge of reality is only a distinction of degree. (b) Phenomenalistic idealism is inconsistent in the very distinction which serves as its starting point. How do we know that we know only phenomena, if we do not know the real? The lapidarist says of a certain specimen handed to him, "this is a sham diamond." Such

pronouncement is impossible unless there be a knowledge of the real diamond. Phenomenalism assumes that there is a veil between us and reality. How do we know it is a veil if we have never been through the veil and looked upon the holy of holies? Our world of experience is the only world with which we have to deal. The phenomenalist makes a distinction which involves him in a contradiction. By what sources does he know that we do not know real things? There is no meaning in the distinction between the sham and the real, unless we know enough about the real to be able to compare it with the sham.

3. CRITICAL REALISM OR TELEOLOGICAL IDEALISM.

We know reality in part and are capable of knowing it more fully. This is the basic thesis of our position. It is also our contention that the progress of knowledge shows an increasing correspondence between mind or the knower and the world. There is a growth in the agreement between thought and things, and this evolution is manifested in the progress of pure science and in its successful applications. Many of our ideas do seem to consist of mental representations of actual past or possible future experiences. Considered as ideas, these representations vary in concreteness and pictorialness from images to the symbolic formulas of mathematics and logic. But these representative ideas contain truth, because the representative experiences that human beings have

had, stand for further experiences which may be had under definite and assignable conditions.

The standpoint of teleological idealism is that mind is a live focus of reality, that there is an active correspondence of mind and reality, in short, it is that mind is a true part of reality. Minds are centers in which the nature of reality becomes conscious of itself, and in this way mind is seen to be something very different from the old soul principle which was shut off by unscalable walls from the world. Reality is not something impenetrably hidden behind a veil. Reality is what is or may be experienced, and what may be inferred from experience. The other side of the moon, the center of the earth and the polar ice-cap of the Antarctic region are items of rational belief which we infer from our experiences.

By saying that there is ether or that there are electrons, what does one mean? I take it that we can only mean that these are logical constructions inferred from experiences. These constructions however, are based on experience, and if there are electrons, then under certain assignable conditions they should be perceptible. Otherwise the electron theory is a useless hypothesis. Reality is experience as actual or possible or both. Our minds and sense organs are genuine functioning parts of the real world. There is this active and effective correspondence between thought and reality and, since we make our concepts, our formulas and symbols of things by thinking about sense data and since, furthermore, these formulas work in experience, it

follows that reality has an orderly or structural character. In short, we agree with Hegel in saying that reality is rational.

What then shall we say of illusions and the so-called errors of the senses? In reality they are errors of judgment and not of the senses. The error is a function of the judgment which I make. The man in delirium tremens has a real experience, so also the one who sees ghosts, but it is only in his *interpretation* of his experience that he errs. He does not set his sensory data in their right relations. In epistemology one of the most hackneyed illustrations is the case of the straight stick that is bent in the water. In the water it looks bent, but we say it is *really* straight. The bentness of the stick is due to the different refractive power of air and water. The visual stick is really bent, but the tactual stick is not bent and further, the visual stick out of the water is not bent. Which is the real stick?

We live most of our time on land, and we have learned that the properties or qualities which are practically important for us are those an object has when close to us. So we agree to make certain sets of conditions define the standard for us and we all agree to that. The "real" stick is the result of the tacit agreement among us socially as to what aspects of the whole series of sensory qualities called "stick" are most important. Our standards of measurement are all of them postulates of the social will. They are a matter of social convention. So then, to return to the stick in the

water, suppose that we were like seals, living in the water and were without hands, the type of important qualities would doubtless vary greatly from what it now is. Or suppose that we lived on the surface of a sphere and were unable to lift ourselves up. Here also we would have a very different set of standardized qualities and relations. It may be objected to this view that what we mean by a real thing is the thing as it exists independently of our perceptions. To this I reply, yes and no! Independent of *my* perceiving it, yes! But no meaning can be attached to the idea of an object existing independently of *anybody's* perceiving it. The independent reality of an object is the reality of something that can be perceived under definite assignable conditions by any percipient organism like our own. Who cares about a real object which is apart from and indifferent to any percipient organism?

The real world is the world of social perceivables. It is the world of things which under definite conditions can, by anyone equipped with the proper mental and sensory equipment, be experienced. Some say that the real object is what God or the Absolute perceives—I don't know what he perceives.

When we take into account the specific characteristics of the percipient, his place, his relations to objects, his history and interests, we can recognize that what he perceives is relative to him and yet real. Teleological Idealism or, as it might be called, Critical Realism, is the view that we know reality, not uncritically, however. It is a fact that we do

perceive, and it is further a fact that we can improve our perceptions by means of the organizing activity of thought. This circumstance indicates, it seems to me, that the world is in agreement with mind.

Many critics of objective or teleological idealism shoot wide of the mark, because they insist on identifying all idealistic standpoints with either phenomenalist "ideaism" or Berkeleyan idealism. Modern or teleological idealism from Hegel down to the present is realistic in its epistemology, as indeed so were Plato and Aristotle. It insists that the human mind knows reality, through experience, as the resultant of the active intercourse of the knower with his world. Knowing may be described, on the one hand, as the process by which the real world becomes conscious of itself in human minds; or, on the other hand, as the process by which minds transcend their merely "given" or biological individuality by becoming aware of the qualities-in-organic-relation which constitute the world. In short, the organization of experience is the organization of selfhood, through the increasing discovery of the nature of reality. The knower, in his perceptual reactions, apprehends in some degree and manner the actual qualities of the real. The knower in *thinking*, and thus organizing perceptual experience, is discovering the systematic and intelligible character of reality as an ordered whole of things-in-relation. The very realistic character and practical success of human knowledge indicates that reality is a purposive and intelligible order. To

hold this is the essence of teleological idealism which is thus, a *metaphysical* theory of reality. Reality as a whole has a significant structure. But such a view is built on an essentially realistic conception of the function of knowing. We know reality in perception and thought, and we know reality thus because it is responsive to the aims and activities of minds and, therefore, is the expression of intelligence or reason.

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CHAPTER XXVII

THE CRITERIA OF TRUTH

The problem of this chapter is the fundamental problem of Logic. Inasmuch as philosophy is the application of logic to the systematic interpretation of the most general features of experience, we have been compelled to use the logical criteria of truth all along the line in this course. It now remains to state systematically what these criteria are and to examine them critically. There are three chief doctrines on this matter—(1) the Copy Theory, (2) the Pragmatic Theory and (3) the Rationalistic Theory.

1. THE COPY THEORY OF TRUTH

According to this theory ideas (including in the term "idea," images, concepts and propositions) are true if they are good copies of reality. Ideas are mental representations of realities. Some of them, that is, images, are pictures of realities. Some of them, abstract concepts and propositions, and in general the conventionalized formulas of mathematics and science are linguistic symbols of realities.

It is not necessary to spend much time now examining this theory. A great many of our ideas, namely all those which refer to objects not present to sense, are either representatives or symbols of

realities. But the test of the validity or truth of these ideas is whether they correspond with, and will lead us, under the appropriate conditions, to an adequate experimental acquaintance with, the things which they represent or symbolize. *The test of their truthfulness is their agreement with experience.* The knowledge about things which they appear to bear is true knowledge only in so far as they can be cashed in in direct experience by perceiving, handling, working with the things represented by them. If I have an idea of a certain office building and the distance to it, my idea is true if it will guide me there. If I have a scientific formula, it is true if it will enable me to solve a chemical or an engineering problem. But when it is maintained that all ideas are copies of realities, we answer that if there are two worlds, the mental world of ideas and the real world outside, which are shut out from direct contact with one another, then we are landed in phenomenalism; and finally, when we think this doctrine through to the end, in an inconsistent subjectivism and skepticism. For, unless we have direct acquaintance at some points with reality, we can never know whether we know anything truly and we can not explain why we should make any distinction at all between ideas and reality, between phenomena and things in themselves.

2. PRAGMATISM

Pragmatism is the name that has been made fashionable by William James and others for a

theory of truth which is offered as a correction of the copy theory.

I think the novelty and importance of the pragmatic theory of truth has been over-emphasized, probably because its progenitors, who were psychologists, were overjoyed at finding a way out of the subjective world of the copy-theory into which the undue subjectivism of Locke, Descartes, Hume and even Kant had kept them imprisoned so long. If they had kept company more faithfully with Plato, Aristotle and Hegel, they would not have been immured in the prison house of subjectivism.

The pragmatist insists, with justice, on the *purposive or instrumental character of ideas*. Ideas, he insists, are not eternal copies of external realities, but working plans of action, devised and invented by man to remove pains and discomforts, escape dangers, promote his affectional and practical interests, maintain and enhance his own well being. The pragmatist is an evolutionist. He looks upon mind and all its products as biological instruments—like sharp fangs and strong jaws and swift feet, only much more powerful and supple weapons in the struggle for existence. Indeed, he admits that mind has the strange power of creating a cultural environment by which human life is lifted far above that of the brutes. Still he insists that reflective thinking would, in all probability, never have arisen, and certainly would never have thriven, if the affectional life of the *genus homo* had always been serene and blissful without alloy, if his desires had always been satisfied the instant they made

themselves felt and if the satisfactions had never left him with a bad taste in the mouth, if promise had always led straight to fulfillment.

Because of discordances, discomforts, pains, because of discrepancies between belief and experience, expectation and fulfillment, thought arises and continues to work until the jarring discords are removed.

"Thought is the means by which the consciously effected evolution of reality goes forward" (Dewey). The only part of reality which we know and are concerned with is in evolution. "Reality is still in the making and awaits a part of its complexion from the future" (William James). In fact, for the pragmatist, *reality is just the process of experience itself* and experience is the result of the continuous and active commerce of man with his natural and social environment, in which commerce, *in saecula saeculorum*, he remakes both environments and remakes them again and again, even though only in small degree. *Thus reality is the joint product of man's intelligent will and the environing nature.* There is no eternal nature of things which the mind has to copy or gaze at; or if there is, it is *ultra vires*, beyond the jurisdiction of the court of human intellect. The world that thought lives and works in is a humanistically colored world, a world that has engendered minds just as it has engendered stomachs and hands. But, of course, the pragmatist would not assert that the intellect has no larger or more varied uses than the stomach, although he would doubtless say that with-

out a stomach the mind could not do much in this world.

But the pragmatist is not a materialist. In fact he is a kind of teleological idealist. For he holds that the mind is a very important kind of organic behavior. It is active and experimental. It not only reacts to stimuli in its own ways, but is a selective and successfully purposive agent. *Ideas are not inherently true. They are not eternal verities. They are made true, become true by leading to all sorts of satisfactory results.* An idea of the way to a certain place to which you want to go becomes true by leading you there. An idea of a certain ethical or chemical process becomes true by leading to the promised land of results. An idea in education or social reconstruction is made true by being put to work and "delivering the goods." "The true, to put it very briefly, is only the expedient in the way of our thinking, just as the right is only the expedient in the way of our behaving."¹ If you can cash in on the amount indicated by the idea, in the currency that the idea promises, *the idea is made true.* Ideas are checks drawn on the bank of experience. If they are returned marked "no funds," they are false. If the money is counted out to you in the shape of concrete satisfactions, they are true. The satisfactions may be paid in terms of worldly success, honor, fame, wealth, power; in terms of the gratification of personal affections, love, friendship, comradeship; in terms of social welfare,

¹ James, *Pragmatism*, p. 222.

in terms of aesthetic gratification, in terms of the mind's craving for intellectual satisfaction; even in terms of the soul's craving for a God to lean on and commune with.

The pragmatic method means "*the attitude of looking away from first things, principles, 'categories', supposed necessities, and of looking towards last things, fruits, consequences, facts.*"¹ "*The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite assignable reasons.*"² "*True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we can not.*"³ "*Truth is made just as health, wealth and strength are made, in the course of experience.*"⁴ For thought to be true it must "agree" or correspond with reality. "*To agree in the widest sense with a reality can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed.*"⁵ "*The essential thing is the process of being guided. Any idea that helps us to deal, whether practically or intellectually, with either the reality or its belongings, * * * that fits, in fact, and adapts our life to the reality's whole setting, will agree sufficiently*

¹ James, *Pragmatism*, pp. 54-55.

² *Ibid.*, p. 76.

³ *Ibid.*, p. 201.

⁴ *Ibid.*, p. 218.

⁵ James' *Pragmatism*, pp. 212-213.

to meet the requirements. It will hold true of that reality." ¹

"This function of agreeable leading is what we mean by an idea's verification." ²

Truth is made largely out of previous truths. "Men's beliefs at any time are so much experience *funded*. But the beliefs are themselves parts of the sum total of the world's experience, and become matter, therefore, for the next day's funding operations. So far as reality means experienceable reality, both it and the truths men gain about it are everlastingly in process of mutation — mutation towards a definite goal, it may be—but still mutation." ³ In short, reality is mutable and so is truth.

These quotations require no comment on my part. They are so clear as to be wholly self-explanatory. Any idea that is useful in enriching and harmonizing experience, in satisfying the interests of the individual or society, by performing that function as a *good instrument*, becomes thus far true. An idea that cannot be put to work is meaningless. An idea that will not yield satisfaction when put to work is false. The pragmatist can even find some uses for the Absolute All-inclusive Knower or Experiencer of a Hegel, a Bradley or a Royce, although James did not think that the moral and religious uses of the Absolute counter-

¹ Ibid., p. 213.

² James' *Pragmatism*, p. 202.

³ Ibid., pp. 224-225.

balanced its practical, moral and scientific uselessness and so rejected it.¹

Pragmatism is right in insisting on the instrumental value of ideas, on their purposive character, and in demanding that ideas should be put to work in the life of concrete experience. It is right in insisting that the fact that an idea works in experience and conduct is a test of its truth. Pragmatism accounts for the origin, utility and truth-value of many of our ideas. A good deal, perhaps the greater part, of knowledge arises and is validated precisely in the ways which the pragmatist describes. He propounds a sound although not novel method of testing the truth of ideas—the scientific method of taking ideas as hypotheses, deducing conclusions from them and testing these deductions by putting them to work and finding whether they lead to the promised concrete results in experience. If a concept, a judgment, a belief works well in practice, there must be something true in it.

James' own statement of pragmatism was too *individualistic*. Ideas may work well for individuals in terms of satisfaction, but their so working may be harmful to society in the long run. A conscienceless profiteer may make millions from the nation's patriotism in time of war and die rich, working untold injury to society. John Dewey emphasizes the social test of working and thus corrects James' view. And, of course, the social and long-run satis-

¹ James, *Pragmatism*, pp. 291 ff., and *A Pluralistic Universe*, Lecture VIII.

factions as tests are logically compatible with the pragmatist position. But even the later pragmatists have not made it clear as to *how*, pragmatically, the conflicts between individuals, or between an individual and a social group, as to the respective claims for satisfaction of their interests are to be adjudicated.

Pragmatism talks much about *good* fruits and *good* consequences, but it has failed hitherto to formulate any comprehensive theory of how relative goodnesses in fruits or consequences are to be judged. It seems to me that the pragmatist must admit that the ability of the stronger or of the majority to dragoon the recalcitrant individual or minority is the final social test. If expediency is to rule both in practice and in theory, I can see no other argument. Expediency thus becomes an euphonious name for brute power, analogous to the "survival of the fittest in the struggle for existence." Perhaps this is the ultimate test, but the choicest spirits of the race have not hitherto thought so and I for one cannot think so. I am unable to admit that the Right is always on the side of the biggest battalions. Belgium may be blotted from the map but the wrong remains eternally a wrong. Hence I agree with Royce¹ that there are absolute truths in logic, mathematics, ethics, history and experience; and the truths of logic, mathematics and ethics imply that there is an absolute creative, rational will

¹"*The Problem of Truth in the Light of Recent Discussion*" in William James and other Essays.

which is their ground and source. "Absolute" pragmatism is the only form of the doctrine that is in harmony with the nature of logical and ethical truth, as at once volitional or purposive and drawing its character and meaning and its inherent authority from the determinate structure of the absolute, rational and ethical will or purpose involved in the teleological or worthwhile and meaningful order of reality.

Pragmatism takes too narrow, too provincial a view of the criteria of truth. In the long run ideas work and yield good results because they are in harmony with the actual structure of reality. And there is useless—that is, useless from any present view of individual or social utilities—knowledge. The story is told of a great mathematician that, having worked out a new theorem, he said "thank God, there is a truth that no one can make any use of." In higher mathematics, in history, archaeology and science, yes even in perceptual experience, there are many things recognized as true that men have not found any use for beyond the satisfaction of knowing them, which means the satisfaction the mind has in being in conscious and loyal harmony with the intelligible order of reality. How are these propositions known to be true? Either because men cannot help perceiving them, as I cannot help perceiving the hideous and useless things that deface the landscape in my town, or because they express the intuitively recognized objective structure of the *rational will* in man, or because their truth follows by the laws of logical consistency

from some other proposition, definition or axiom which expresses some fact of the objective rational order. It may be that use will be found for every truth ultimately. Let us hope so. If the world is rational and just, it must be so.

There are disagreeable truths which we must face. When my banker informs me that my account is already overdrawn and I have no money to put in, or if I am wholly bankrupt, I have yet to find the person to whom the knowledge of that truth is agreeable. At the present juncture, we must face as a nation discomforts, sacrifice and death of many of our choicest sons in *loyalty to a cause*. The pragmatist says that what proves satisfactory, when the returns are all in, will be true. But, in the matter of moral principles, oftentimes the returns are never all in, in this world. How do I know that more satisfaction will ensue to anybody if I go to the war and sacrifice myself for my country or if I send my son? How do I know that my family or even the third generation to come will be happier? I do not. I only know that if it is clearly my duty—I *ought* to go, I *ought* to send my son. How do I know that by conscripting the youth of this land to fight in Europe the world will be made safe for democracy and this will be a better world? I do not know. I only hope so. But in *loyalty to the cause*, I know that we must not shirk the issue. I only know that, since we are convinced of the justice of our cause, and that if a brutal militaristic autocracy triumphs the world will not be a fit place for our children and our children's children to live

in, therefore, we ought to do whatever is necessary to defend that cause.

3. THE RATIONALISTIC THEORY OF TRUTH¹

Knowledge comes from several sources. What one perceives or feels, one perceives or feels just as brute fact. We may recognize, examine and analyze experience very rigorously but, finally, we get down to data that are not further analyzable. I see the light and feel the heat and cold, whether these be agreeable or disagreeable. I apprehend impacts and motions as brute facts. Any idea in regard to experimental facts is true only if it is in agreement with the determinate experience or experienceable facts. The facts may be unsatisfactory to you or me, but there they are.

I also intuitively recognize, by my reason, certain truths of logic and ethics. The elementary propositions and axioms or postulates of mathematics and logic, on careful reflection, appear to me true whether you or I care for them or not. *They express the intellect's native ways of working.* They reflect the rational structure of reality. The statement that two contradictory propositions cannot be true simultaneously and in the same situation appears to me self-evident. I cannot conceive a world in which it should be false. In such a world "true" and "false" would have no meaning, and it would not even be a world.

¹ Perhaps a better name for this theory would be either "rationalistic experientialism", or "rationalistic realism".

Thus there are ideas that are true because they are in agreement with the given or finite facts, and there are ideas that are true because they express the meanings of the mind's own reflective intuitions, of its own rational procedure in thinking about its world. So far as these truths go they are absolute. Further than this, some minds have a passionate hunger for putting truths together into a coherent whole, for organizing ideas into a system. This ideal of truth-seeking is the philosophical ideal. It is the harmonious organization of all separate truths into a coherent whole. James really admitted these criticisms when he said that we are *coerced* by the determinate order of fact and of intuitively recognized truths of abstract relationships, and when he said that intellectual consistency is the most imperious claimant of all for satisfaction. The fact is that our purposes and our interests do not always get or deserve satisfaction. Sometimes they are shattered into fragments and remade by the *logic of events*, into larger purposes and meanings. Reality is in mutation, but there is a logic of events, *a determinate order of mutation*. The process of reality has a specific structure, and part of our truth consists in apprehending and symbolizing that structure *as it is*. Mind in us has a logical and ethical structure. Our images, concepts, theories and assumptions change, to fit enlarged and finer apprehensions of the factual order and to meet the mutations in that order. But through all the changes and chances in the mental life of ideas, through all the scrapping of old ones and the making

of new ones to fit the facts, there run certain fundamental ways of thinking and acting; the elementary principles and postulates of knowledge and conduct. It would belong to a treatise on logic and epistemology to discuss these theoretical principles fully, but we may state the principal ones briefly—the *logical identity of objects of thought with themselves or the invariant character of these objects, the impossibility of admitting the truth of two contradictory propositions, the self-evidencing quality of the elementary propositions of logic and mathematics, the rationally evident character of our most universal and fundamental moral judgments, the demand of the mind for the organization of knowledge into a coherent whole which gives us the logically self-consistent systems of mathematics and which, in the form of the principle of sufficient reason or ground, appears in our insistent need in science to discover the relevancy of facts to one another, to classify facts and connect them in a system of causally related or reciprocally interdependent elements.* One could sum up this matter as follows—the *absolute postulates of knowledge are the logical identity of every object of thought with itself, and the harmonious organization or relevancy of all true judgments to one another in a systematic whole.* And there are ethical principles which are valid whether you and I obey them or not, whether we find that they satisfy our concrete interests or not. We may as individuals or social groups be loyal or disloyal to honesty, justice, love, fellowship, loyalty itself, but our actions do not make these

qualities right if expedient, and wrong if inexpedient. If expediency be the highest good, there is no highest good. Plato was right in holding that there are values and relationships, principles of moral and rational order, that give meaning and status to, and that endure through, the temporal flux of human experience.

This generation has been permeated and captivated in its thinking by the thought of evolution, ceaseless flux and relativity in all things. Let me remind you that there is no meaning in evolution, or even in flux and relativity, unless there be an enduring teleological order of meanings, by reference to which we measure and judge the dates and relations and meanings and values of the tides and times of human circumstance and deed and of physical circumstance as well.

The fullest criteria of truth are the coherence of ideas with experiences and the coherence of ideas, as interpretations of experiences, with one another. The ideal of knowledge is the harmonious organization of thinking and experience, in which thinking appears as the instrument for the organization or interpretation of experience, by which experience becomes conscious of its own meanings and by which its own enrichment and more harmonious fulfillment are furthered. This ideal, although never fully realized, is the animating motive of the thinker at his best.

Reality is a teleological and self-organizing system, and thinking is the chiefest instrument for the maintenance and enhancement of this system. The

function of thought is both to discover the existing relations or relevancies of things to one another and to promote the increase of these relationships. Thinking is the chief instrument of organization in a purposively ordered world, a world controlled by a rational and ethical order, as I believe.

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CHAPTER XXVIII

THE SPECIAL PHILOSOPHICAL

DISCIPLINES—THE SYSTEM OF PHILOSOPHY

The central and fundamental philosophical discipline, metaphysics, is the theory of the nature or structure and meaning of reality as a whole. While writers may show philosophical insights in various special fields and, to the extent of these insights, deserve the name philosophers, a system of thought can be properly called a philosophy only when its various aspects are built upon and articulated with a metaphysics or doctrine of reality. Metaphysics includes, as special divisions:—*cosmology* or philosophy of nature, whose chief problems are the nature or meaning of space, time, matter, motion and evolution; *meta-psychology* or philosophy of selves and society; *epistemology* or philosophy of knowledge; and *axiology* or philosophy of values. These special divisions of metaphysics cannot, however, be pursued successfully in isolation from one another. The subject matter of the present work has consisted:—(1) in tracing the emergence and development of the fundamental problems and theories of metaphysics; and (2) in discussing the present status of these problems and theories. It now remains for us to consider briefly the respective fields, and relations to general philosophy or metaphysics,

of the special philosophical disciplines. These are: Logic, Ethics and Social and Political Philosophy, Aesthetics, Philosophy of Religion and Philosophy of History. Before proceeding with this matter, it is desirable that an indication be given as to the relation between philosophy and psychology.

1. PSYCHOLOGY AND PHILOSOPHY

There is no unanimity of opinion among the psychologists as to the proper fields and methods of psychology. The point on which there is nearest approach to agreement is that psychology is *not* the science of the soul, that it has no concern with the question whether man is a soul or permanently unified self. It is also pretty generally agreed that psychology is as much an independent science as, say, chemistry, and therefore, like any other special science, is independent of philosophy. Still there must be some good reason, other than the slow development of the science itself, why psychology has remained so long in closer association with philosophy than the other sciences. Before we can discover this reason, we must essay a statement as to the province of psychology.

It used to be said that the business of psychology is to analyze, describe and correlate the elementary constituents and processes of consciousness, or to determine in detail the *structure* of *consciousness* in all its forms and stages. This, the standpoint of *structuralism*, was the classical standpoint until after the middle of the nineteenth century, when evolutionary biology began more and

more to hold sway over men's thinking about human nature. Of course it had been already recognized that psychology is concerned, too, with the relation between consciousness and the nervous system, or, in general terms, between mind and body.

The rapid development of the evolution hypothesis led to a change of emphasis in psychology. Mental processes began to be viewed as instruments of adaptation to the environment, as tools for the more successful adjustment of the relationships between man and nature, and the individual man and society. This is the standpoint of *functionalism*, which does not deny all value to structural analysis of mind but makes such analysis subservient to the determination of the biological or life-serving functions of the mind. The mind in all its phases, whether clearly conscious, subconscious and perhaps unconscious, consists of special types of functional adjustments of the organism. William James' great work, *The Principles of Psychology*, was the first and most influential in making this change of emphasis. Herbert Spencer's *Principles of Psychology* is written chiefly from the same standpoint. Lately a third standpoint has arisen — *behaviorism*. The ultra-radical behaviorist denies that consciousness is a fruitful or even legitimate subject of study. He proposes to consider only the objective or physical side of behavior. The moderate behaviorist admits that the most important data for psychology are those obtained from the study of conscious thinking organisms, but he insists that psychology is primarily the science of

human behavior. I am of the opinion that the psychologist cannot afford to neglect permanently any one of these standpoints. Psychology, as I understand it, has for its central domain the systematic investigation of the conscious and intelligent behavior of human individuals. To successfully carry on this work it cannot afford to leave out of account, either the purposive adaptation-functions which the mind of the individual performs, or the structural analysis of mental complexes, such as perceptions, memories, images, judgments, conceptions, instincts, emotions and sentiments, into their elementary features.

What, then, is the right relation between psychology and philosophy? Psychology is a special science, inasmuch as it studies the behavior of the conscious individual in relation to the physical order and the social order, without raising the metaphysical questions as to how one is to conceive, *ultimately*, the nature of the self in relation to the body and the relation of the psycho-physical individual or group of individuals to the world as a whole; in so far as it describes the process of thinking, without attempting to determine what are the final norms or criteria of knowledge; in so far as it describes the processes of volition, without attempting to determine the valid norms or standards of conduct; and in so far as it describes the processes of æsthetic feeling, without raising the question as to the place of beauty in reality. But when psychology does attempt to deal with the ultimate problems of the relation of mind and body, of self and world,

of the criteria of truth and goodness and beauty in the universe, then it passes into philosophy; it passes into metaphysics, ethics, logic, epistemology and aesthetics. Moreover, it is not easy for the psychologist to avoid raising the philosophical issues. Inasmuch as the problems of philosophy all center in the questions as to the place of the self and society in the universe of reality, it is quite evident why psychology has always lived, and should continue to live, in intimate association with philosophy. It is not for the permanent good of either discipline that they should be kept asunder. Without philosophy psychology's work becomes a blind trafficking with physical instruments and physiological measurements. Without empirical psychological foundations philosophy becomes a dialectical exercise in spinning logical cobwebs.

2. LOGIC

Logic is the systematic investigation of the fundamental processes or methods by which thought arrives at truth, or the right methods of making judgments and inferences. Psychology likewise studies the processes of knowing, but from a different standpoint. Psychology is concerned to analyze and describe the cognitive processes simply as mental events which occur in individual minds along with other kinds of mental events. It is not the aim of psychology either to formulate the most general canons or norms of correct thinking or to formulate all the various methods by which these canons are applied in the actual work of science.

But this is just what logic aims to do. It is true that logic studies actual processes of thinking and therefore makes use of psychology, but Logic finds its material chiefly in the analysis of typical cases of correct thinking as exemplifying the norms of knowledge. Hence fair samples of correct thinking in the practical affairs of life and in all the sciences furnish the materials of Logic. It studies analytically such cases in order to determine the fundamental procedures, in judgment and inference, that are involved in them.

It is evident that right judgment and inference, as exemplified in concrete cases, presuppose and imply certain most fundamental principles of knowledge. These are the laws or principles of all *sound thinking*. Such principles are:—the principle of coherence or freedom from contradiction (two contradictory propositions cannot both be true); the principle of identity (a logical subject of thought must be identical with itself); the principle of sufficient ground or causation (there must be a sufficient ground for every event); the principle of uniformity (the same conditions or causes will have the same effects). Since this is but a brief indication of the province of Logic, I shall not discuss whether the above named are the only ultimate fundamental principles of Logic. It will be obvious to the thoughtful reader that the above principles are presupposed in all genuinely scientific or systematically thoughtful procedure of the mind and that, therefore, a sound logical theory is not only implied in every kind of scientific procedure, but

as well that it is the primal condition of sound philosophy. Every true judgment and inference in practical affairs, as well as in science, is a bit of applied Logic; and metaphysics is an applied Logic of the whole universe of reality or experience.

Logic is frequently divided, in elementary textbooks, into two parts—Deductive and Inductive Logic. Such a division, while it may have practical pedagogical justification, overlooks the fact that in the actual work of science, deduction and induction are both involved and, while some sciences are more inductive or deductive than others, no science is purely either the one or the other.

3. ETHICS AND SOCIAL PHILOSOPHY

The central problem of Ethics is the determination of a standard of the good or a rationally definable criterion of intrinsic values, a standard for voluntary conduct. Is there any common measure for those ends that are intrinsically good or have value in themselves for the human agent? If so, what is it? Is it a maximum of agreeable feeling? Or obedience to rules of reason? Or is it something richer, more complex and concrete than either pleasurable feeling or the service of reason? The Hedonist holds that the ethical standard is the maximum of agreeable feeling for the individual agent and his fellows. The Rationalist holds that right conduct consists in the subordination of feeling to reason. The Energist or Self-Realizationalist holds that the standard of value is the organization and

actuation of the fundamental interests of the self as a rational and social agent.

Another important problem for Ethics is the question of the right relation between the moral consciousness or *conscience* of the individual and the established social code of conduct in the group or groups of which the individual is a member. This is an extremely important and difficult question which involves two other problems, namely: — (1) to what extent is the individual's conscience actually, and to what extent should it be ideally, the echo of the social or group-code; and (2) what are the right relations between the individual and various social groups? To what extent and in what directions should the individual sacrifice his private interests to group interests, or the interests of narrower and more deep going groups, such as the family or the trade or professional group, to wider group interests such as the nation?

Moral conduct is conduct that has social reference, so that Ethics and Social Philosophy cannot be sharply distinguished.

Social and Political Philosophy, in distinction from Sociology and Politics which are sciences descriptive of actual social and political institutions in the present and in history, is concerned with the ethical ends or values that are involved in social institutions and activities. It studies the facts of social and political life from the standpoint of a systematic doctrine of the ethical values or ends that should be realized by social institutions, by family, school, industry, the state. Social Philosophy

is thus really Applied Ethics—the system of moral valuations applied to the judgment of existing institutions such as school organization, economic organization and political organization, in the light of the intrinsic human values or human interests which these organizations exist to further. Thus, Ethics is inseparable from Social Philosophy, as Plato and Aristotle long ago soundly taught. Ethics is the philosophical doctrine of human values, of the various inherently worthwhile interests or ends which mankind has the right and duty to aim to attain and conserve.

The investigation of the problems of Ethics and Social Philosophy involves psychology, since their subject matter is man as a feeling, thinking and striving agent. A sound ethical and social doctrine of ends and values can be built up only upon an adequate psychology—one which makes a careful inventory of man's original nature, his inheritance of instincts, impulses and more general capacities such as reason or intelligence. But man's original nature is profoundly modified by his social nurture, including the social and spiritual patterns and ideals of conduct which are held up to him for admiration and imitation in his plastic period of youth. A sound theory of ethical and social values can be formulated only when the various cultural or spiritual-historical strains which shape and stimulate the individual in society have been examined and evaluated.

Ethics and Social Philosophy must, therefore, be based on an extensive and intensive apprecia-

tion of the historical development of the whole spiritual heritage of man.

4. AESTHETICS

Aesthetics is the philosophy of aesthetic feeling and judgment. Since Kant's Critique of Judgment was written it has been recognized as a division of philosophy. We may investigate the psychological and physiological conditions of aesthetic feeling and, thus far, Aesthetics is a branch of psychology and physiology. We may consider the history of aesthetic appreciation in relation to the history of art and, in this regard, Aesthetics is a branch of the history of culture. But we may also ask, what is the significance of aesthetic feeling and judgment with reference to man's place in the universe? Does the fact that the sounding cataract haunts one like a passion, that one feels oneself to be a part of the mountains, seas and sky; in short, does the whole human reaction in which we feel beauty, sublimity, picturesqueness in nature, in which perhaps, we feel with Wordsworth "a presence far more deeply interfused, a motion and a spirit which impels all thinking things, all objects of all thoughts," does this aesthetic reaction to nature mean perhaps that nature is the expression of a life, of whose rich and harmonious meanings these sympathetic feelings of ours for nature are the echoes or adumbrations? Is Beauty an avenue to the vision of reality? Does it unlock gates otherwise closed, by which, even though intermittently, we are permitted to enter into contact with reality

in some of its glory? Or are all our feelings for nature, our sense of a divine mystery half revealed, half concealed in the sunset, the mountains, the forest brook, the quiet lake and the majestic sea, merely subjective reverberations in our organisms of a world that in itself is but the stony and insensate realm of mass particles in motion or the dead and unfeeling completeness of some static Absolute? These questions are hints as to the metaphysical problem suggested by man's aesthetic relation to nature; and similar questions arise from a consideration of the ceaseless striving of man to express and satisfy his emotions in art-forms of beauty, sublimity and terror, and from the consideration of the refining, purifying, healing and refreshing influences which have come to men through converse with nature and art. It is beyond the scope of this introduction to discuss these questions. I must leave the matter with the suggestion that, perhaps, the painters, the sculptors, the musicians and the poets, apprehend an aspect of reality that is hidden from the eyes of the dry-as-dust scientist or arid dialectician. It is my own conviction, one that has grown upon me with the years, that the aesthetic experiences are more than subjective solaces or illusory refuges from the "fretful stir unprofitable and the fever of this world;" that the beauty and the grandeur as felt in nature, in human life and art, are forefelt apprehensions, though intermittent and fragmentary, of an order, a harmony, a concrete and meaningful life that belongs somehow to the heart of things. The true

greatness of poets such as Wordsworth, Shelley and Whitman, and prose writers such as Ruskin and Thoreau, resides in the fact that they have been prophets of the aesthetic vision of a higher reality beyond and yet interwoven with the dumb shows of sense. The same fundamental notion of *living order* or a *harmonious organization of experience* is the basic motif of science and logic which aim, not at reducing individual centers of activity and experience to illusions, but at finding the world to be an ordered or organized realm of individuals. And the practical, moral and social activities of man have the same aim—to construct a harmonious, well organized whole of living centers of experience and deed—the ideal society—in which the law of each member's being is fulfilled by expansion into harmonious action and feeling with the whole, as the fulfillment of the law of the whole through the individuality of each. Thus aesthetic experience interprets and fulfills, from the standpoint of feeling, the vocation of man which, more abstractly, or in more formal shape, urges on his theoretical and his practical life activities. At this point the transition to the consideration of the place of religion in philosophical system is readily suggested.

5. THE PHILOSOPHY OF RELIGION

Religion in its most significant forms is the affirmation of the supremacy in the order of reality of all the organized and coherent values pertaining to the life of man in society. Religion idealizes man's values as a socialized individual, or as a

society of individuals regenerated and redeemed through participation in the common life. Religion affirms that the system of ideal values not only must be the paramount goal of human life, but as well that these values, in their organic wholeness as fulfilled in the socialized individual, are securely seated at the heart of reality and control the process of things. God is the incarnation of the system of ideal values. Therefore God is essentially the perfect social self—the Supreme Self—who lives and fulfills himself in and through the regeneration or development of the spiritual man in and through the ideal society. God is the ideal embodiment of the values which are realized by the moral and rational self as a member of a social order which functions to serve these values. Religion affirms the ideal unity and ground of value to be the most real being.

The business of the Philosophy of Religion is to determine what religion means and aims at, in the successive and varied phases of its development in history and in its operations in the individual's experience and the social order. Religion is thus both social and individual, both historical and personal, and the Philosophy of Religion should evaluate the history of religion or interpret the movement of religious evolution, the religious experience of the individual, and the religious attitude of the social group. From this standpoint, too, it should determine the function and meaning of the God-idea, of salvation, regeneration, redemption, atonement, the freedom and vocation of man.

In short, the Philosophy of Religion is the metaphysics of selves, society and values, applied to the constructive interpretation of the religious experience of the race in the light of the history of culture and psychology. So large and deep going an area of human social life and individual experience as religion represents must be taken account of by the philosopher; and, if he cannot find room for it in his rubrics, then it is more likely that his rubrics are too small and rigid than that the whole religious history of the race is an illusion.

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CHAPTER XXIX

THE STATUS OF VALUES

Knowing is a human affair. The objects of knowledge may be *physical things*, complexes of sense-qualities, that is groupings of the qualities apprehended through man's perceptive mechanism; or *relations* between physical objects and events, that is, laws of nature generalized by the mind from the analysis and comparison of sense-perceptions; or *selves and their actual relations* to the physical order and to one another; or, finally, the objects of knowledge may be the *appreciations* or *valuations* with which man stamps the objects known, and the aims and ideals by which he determines his active relations to physical nature and to other selves.

Since man is not a colorless and passive knower, who might reflect the characteristics of his surroundings as a good mirror reflects things or as a glassy water surface reflects its bank, but a knower who *feels and acts*, he judges the objects he knows to have various degrees and kinds of *worth* and *unworth*; and he strives to so alter or maintain the interaction of his surroundings and himself as to remove the experiences that have unworth for him and to maintain and increase these experiences that have worth.

There are some things in the world of my daily round of experiences that have little or no plus or

minus value for me. To meet and apprehend them has little or no bearing on my weal or woe. Such are most of the buildings and many of the people I pass in the streets. Ordinarily, I ignore them. I am scarcely aware of their existence. On the other hand, the buildings in which I live and work, the members of my family and my professional associates, and even the weather have worth for me. I apprehend them with interest and I react to them with approval and disapproval. I exercise preferences in regard to the actual and possible objects of experience.

In short, man appreciates, enjoys, loves, admires, and therefore seeks, or he dislikes, fears, hates, and therefore avoids certain objects and situations. *Valuation* is the most persistent and characteristic attitude in human nature. Man seeks to acquire and retain knowledge, power, wealth, comfort, fame, love and friendship, because he values these things as experiences. The systematic study of the main types of human valuation and the relations between them is an important part of philosophy. As we have seen in the previous chapter, ethics, aesthetics and the philosophy of religion, are *sciences of human values* or *axiological sciences*. The word "axiology" means science of values. It is derived from the Greek *ἀξιος* (worth) and *λόγος* (reason). All these divisions of philosophy are concerned primarily with the central fact that man, in the various aspects of his cognitive and active relations to his world, is a being guided by *selective preferences* or *interests*. These preferences, in the

last analysis, are derived from *feelings*, from the emotions and sentiments which constitute the affective complex which is the self considered as a center of feeling and source of valuation, choice and volition.

Here we are concerned only with making distinctions and definitions with sufficient sharpness to see what is the problem of the status of human values in reality. And, first, we note that there is an important distinction in human values between *instrumental* or *mediate values* and *intrinsic* or *immediate values*. Wealth, position, manual skill, tools, knowledge of foreign languages, are usually means to ends. My pen, for instance, has only an instrumental value. It mediates my getting my thoughts on paper, and this achievement, in turn, is a means to getting them noticed and accepted by my fellows. On the other hand, to love and be loved, to have friends, to be esteemed by one's fellows, are values in themselves. These latter are *intrinsic values*. To live in these experiences is to enjoy *immediate values*. Even to *know* the facts and laws of nature, historical facts and relations, or philosophical principles, has, for some people, intrinsic value. One may take satisfaction in knowing things, regardless of whether anyone else knows that one knows, or esteems or rewards one for knowing, regardless of whether knowing makes one healthier or wealthier, or physically more comfortable. One values knowledge for its own sake because one feels that an essential demand of one's life is being satisfied by knowing. Moreover, certain kinds of

knowledge give aesthetic satisfaction. We speak rightly of the *beauty* of a piece of deductive reasoning, the *grandeur* or *sublimity* of a scientific principle such as that of gravitation or evolution. Aesthetic experiences gained through poetry, the drama, fine prose, music, painting, or the enjoyment of nature, are to many people intrinsically worthful. "Beauty is its own excuse for being."

While many persons have no joy in knowledge for its own sake and, hence, knowledge has for them no immediate worth; or, have no keen joy in beauty for its own sake which, hence, for them has no immediate worth, there is one type of values which is universal in its appeal. The individual who has no preferences in this type is an idiot or a monster. This type consists of the fundamental valuations or preferences of human persons as individuals and as social beings. Every normal human being desires the companionship, esteem, friendship or love of some other human beings. Every human being who has any self-respect desires the respect of others. Every human being desires to satisfy the fundamental interests of his being, desires to feel and act in the ways that express and realize what he esteems his true selfhood. Now, ethics is the scientific or systematic study of these fundamental types of human value and of the principles of social organization by which the achievement and permanence of these values are furthered. Honesty, integrity, justice, fair-mindedness, active sympathy, conscientiousness, kindness, the spirit of service — these terms connote qualities of selves which con-

stitute fundamental ethical values; because they are not merely indispensable means to the maintenance of a social order in which selves can be truly selves, but, moreover, they are intrinsically worthwhile qualities of human nature. If "love is the fulfilling of the law", that is because love is taken to include all the other qualities in the presence of which man's higher selfhood can come to its full expression.

And all the movements which have aimed at social justice, at the bettering of the economic, industrial, educational and political conditions of man's social life are to be judged by their serviceableness in promoting the realization of the fundamental human values. *It follows that all intrinsic values are located in the conscious lives of selves or persons.* It is nonsense to talk about values that no self feels or seeks, about preferences that no self prefers. *The status of values in the universe of reality is the status of selves.* For selves alone feel, enjoy, suffer, strive for and win values. If selves, with all their strivings, sufferings and enjoyments, with all their poignant feelings and unremitting efforts, are but evanescent spume cast up by the waves of the blind and chartless ocean of being, then certainly love and justice, integrity and loyalty, and the other ethical qualities which lend dignity and worth to human life are equally transient. The world is not just and not rational, much less kind, if the whole sequence of human life, in which alone, so far as we know experimentally, justice, reasonableness, kindness, are to be found in finite and imperfect but ever present and ever

growing forms of realization, is doomed to extinction. Indeed, if the life of selfhood, the life which is now throbbing in humanity, does not endure and grow permanently the very norms of thought, the logical values themselves, are homeless in the universe and there is no universe, only a hideous bedlam.

Science and logic postulate the rationality, in a broad sense the justice, of the universal order. Science and logic presuppose the validity of the fundamental intellectual values, presuppose the obligation to observe carefully, to think clearly, disinterestedly and persistently about whatever subject matter we may be concerned with. In the last analysis science, logic and ethics rest upon the same postulate—the rationality and justice of things, the permanence of fundamental values in the order of reality. But to talk about reason, much less justice and love ruling the universe, if all selves or souls are ephemeral phenomena, is, I repeat, to talk nonsense. To talk of eternal values which rule serenely in a timeless world of being, if the life of humanity does not endure somehow as an essential and worthwhile constituent in the universe of reality, is to talk “transcendental moonshine”.

Science, a better social order, a freer, fuller life for human personality, beauty, philosophy itself, are all vain dreams which man conjures up to hide from his gaze the reeking shambles of reality which he fears to face, unless the fundamental human values endure through the permanence of rational and ethical spirit.

The last and deepest problem of philosophy which is, I remind you, the reflective study of life and experience in their wholeness, is the problem of religion. And religion, as I have already pointed out, is always at its best an affirmative answer to the final question of humanity—do our highest values endure and if so, under what conditions?

The true meaning of postulating a God, the animating principle of faith in God and the higher order of which he is the guardian and sustainer, is this affirmative response to the cry of mankind for the assurance or promise of the *permanence of the life of most worth*. Religion is the yea-sayer to all the higher values. If it denies some values dear to the hearts of some persons, if it calls to renunciation and sacrifice of the lower self, it does this in the interest of higher values.

As to the questions, how fundamental values come to appear in the life of humanity, and whence they derive their authority, three chief answers have been given — (a) Dualistic Supernaturalism, (b) Agnostic Relativism or Subjectivistic Humanism, (c) Teleological Idealism.

The dualistic supernaturalist avers that the source and authority of all supreme values is the descent into human life, at special times and at special crises, of heaven-sent messengers authenticated with supernatural power. The "Thus saith the Lord" has its seal in miracle working and mystery mongering. Jahweh thunders from Mount Sinai. God speaks through a divine revealer and validates his utterances with physical portents, or

he leaves, through the divinely appointed succession of a hierarchical order, continuous special authorities in an ecclesia or church.

(b) The agnostic relativist points to the fact that the language and the very contents and meanings of the speech of revealers are conditioned, indeed, determined by the whole social culture of their times. He points, with the eye of the critical historian, to the way in which fundamental values have changed and evolved under the influences of industrial, political and scientific changes. He points out, for example, that the values authorized by Mosaic religion differed from those of later Hebrew prophetism; the latter from those of primitive Christianity. He triumphantly shows, by historical analysis, that the social values of the primitive Christian community differed greatly from those of a present day Christian state. He shows that the change is due to a mass of economic, political and intellectual changes. Finally, he calls attention to the significant fact that dualistic supernaturalism rests upon a cosmology that is inconsistent with modern science. The latter has built up, step by step, a conception of the infinite extent, complexity, duration and orderly character of a world in which there is no place for the eruption now and then of miraculous portents.

The agnostic relativist concludes that the human values are the products solely of the social workmanship of man, a creature weak and ephemeral but gifted with an indomitable will and a strange capacity for planting and training up,

amidst the savage wastes of the blind forces which alone operate in nature, a cultivated plot of the finer humanity. Man, he says, is engaged in an incessant struggle with the savage and relentless forces of nature. He will ultimately go down to defeat and extinction, but in the meantime the only life of effort that gives at least a transitory, though pathetic, gleam of grace and sweetness to life is the ceaseless endeavor to improve his little garden of the spirit, to tend and nurture in it the fruits and flowers of honesty, integrity, loyalty, justice, truthfulness, comradeship and sympathy. These values are all doomed to ultimate extinction but, in the meantime, let us nobly strive and nobly help one another.

The agnostic relativist fails to solve one riddle. How, if nature or reality be as he conceives it, could it ever have given birth to man, its insurgent son? If man, too, be but the blind offspring of savage and insensate forces, surely it makes an even greater draft on one's credulity to say that from the blind welter of mass particles in endless whirling motion there could have sprung the tenderesses, the heroisms, the noble friendships, the undying devotions to human kind, the willing self-sacrifices for those illusions of great causes and high enterprises, which the better part of mankind displays? How could even such illusions as justice, integrity, sympathy, love, loyalty and self-sacrifice have come into being? Agnostic relativism, which holds that values have no status except in the better members of the living generation, hence

is a *subjectivism*, in which the present living generation of the race, not the individual self, is regarded as the subject who creates values out of nothing. This view is, of course, materialism, and the single criticism in which all criticisms of materialisms concenter is that it makes all human values illusions, mysteriously and episodically engendered by the operation of blind physical forces.

(c) *Teleological or Axiological Idealism*. This view accepts the criticisms of dualistic supernaturalism and holds, too, that values are wrought out by man in history and, hence, are subject to fluctuation, to change and evolution, as man's social life develops from simpler to more complex forms, as his tools for intellectual analysis and economic and social organization improve. But the teleological idealist holds that the persistence and evolution of values, the change which involves continuity of growth in the process of discovering values and means to realize them, logically implies that human values, and the selves which realize and enjoy them, are not mere ephemeral by-products of nature. Man is a true and effective part of reality. He is a legitimate offspring of the universe. He must be heir then to a part of the universal heritage. The values he creates he does not create out of nothing. Values are not vain imaginings. It is the same being who perceives and knows who likewise values, prefers, chooses and acts. It is the same homogeneous world in which he grows in knowledge and power, and in the consciousness of values and the ability to realize them. Man and his valuations are

somehow at home in the universe. Man is quite as able to cash in on his preferences, his valuations, as he is on his knowledge or his industrial activity. The universe which, in part, we know, is a universe which answers questions that are rightly put and to which answers are persistently sought. It is the same teleological order which sustains and honors human values. Values are neither mysterious visitants from an alien sphere nor phantoms of human imagination. Values are the ways in which the ruling purport, the ineluctable life and feeling of the universe, are expressed in a multitude of finite centers of feeling and action—in the life of humanity.

In almost all the great historic systems of philosophy, the author's concept of value determines the character of his fundamental standpoint.¹ The Ideas that play the chief part in Plato's interpretation of reality are Ideas of Values—logical relations, beauty, justice, wisdom; and the supreme and ruling Idea is the Good. The same is true with regard to Aristotle. God, the pure form, is the ground of all forms, and the finite forms or entelechies are the ordering principles in nature. The highest value for Aristotle is the aesthetic-intellectual concept of the pure self-activity of Reason. Plotinus' conception of reality is controlled by the ideal of mystic union of the finite selfhood with the Absolute Spirit. Despite his show of geometrical demonstration,

¹ Even in systems of materialism it is the apparent clearness, simplicity, self-evidence and cogency of the principles that determines the standpoint taken.

Spinoza's world view is determined chiefly by his vision of finite selfhood as finding its fulfillment and euthanasia in a blessed absorption in the divine Substance. For Leibnitz the supreme values are the infinitely diversified individuality of the monads and the continuity and organization of the universe into a harmonious whole.

Kant's system is controlled by his concept of the moral dignity and freedom of the human personality; of the tremendous seriousness and infinite significance of man's moral vocation. The same motives determined the fundamental outlines of Fichte's philosophy. For Hegel the supreme value is the spectacle of the self-realizing march of Spirit through history, having as its goal the harmonious organization of finite selfhood into conscious union with the Infinite Idea. For Schopenhauer the peace which comes from the cessation of all desire and the ending of all inner discord is the highest value.

For Berkeley the vision of God, the great other spirit, is the highest value. For Hobbes, Locke, Hume and Mill the highest value lies in the reconciliation of the social and political freedom of the individual with the needs of a social order and authority. How to ensure to the human individual the liberty to develop and lead his own life as a member of the social order, without which the development and exercise of individuality is impossible—such has been the dominant problem of English philosophy from Hobbes to John Stuart Mill. Mill expressly states that he was led to his logical

investigations in order to lay secure foundations for a science of society.

It is in this British feeling for the worth and rights of human individuality that we find the keynote of William James' philosophy. For the school of objective idealism, (Bradley, Bosanquet and others), the supreme criterion of value is the harmonious organization of experience into a systematic whole, the fusion or union of all aspects of experience into a living totality, in which all differences are unified, all conflicts are healed, all discords are harmonized. In this harmonious totality the contrast between reflective thinking and its objects passes away into a perfect intuition or state of feeling in which knower and known are wholly one; the conflict between the "is" and the "ought-to-be", between desired ideal and achieved fact is laid at rest. In it all pain and discord are contributing elements in the harmonious feeling which pervades the whole. The whole is the all-inclusive individual experience in which all imperfect individuals are elements. Thus the highest value is the highest reality. The same standard obtains for truth as for other aspects of value. For the measure of truth in any system of judgments is the internal coherence of the system.

Royce's conception of value does not greatly differ from the one just stated. Absolute reality is the fulfillment of all values, for it is the complete fulfillment of the meaning of all finite ideas, the complete satisfaction of all finite purposes.

The chief objections raised to the idealistic theory of value are: (1) in its eagerness to identify the absolute value of harmony, internal coherence, perfection of organization in experience, with reality, it overlooks the fact that, for human beings, value is an ideal aim only gradually and partially achieved in time, and thus it seems to deprive the human process of striving for and achieving harmonious organization, the whole temporal life of effort and progress towards higher values, of any final value. For, identifying absolute value and absolute reality, this doctrine assumes the timeless reality of the ideal values; (2) consequently, it is objected, eternalistic idealism cannot find any lasting significance in the deeds and experiences of the imperfect and striving human individual.

The pragmatists and personal idealists have, while admitting that the ideal of value is harmonious experience or harmony of life and feeling, protested against the assumption that all value is eternally or timelessly real. This protest, on behalf of the human person's life as a process in time, is the chief motive of the tendency known as *temporalism*, which insists that all reality must traffic in time, that value must inhere in the temporal activities of selves and the historical order, if there be any value in reality.

Windelband, Rickert and other representatives of the Philosophy of Values in Germany, have insisted that the validity of the norms of logical thinking, the very basic principles of knowledge, no less than the acceptance of moral ideals and canons of

aesthetic judgment, rest on the *act of the thinker* in accepting the conditions under which alone the purpose and will to know the truth, to will the good, and to accept the beautiful, can be fulfilled. In other words, if you seek truth you ought to and must accept the rules of the thinking game, just as if you seek the good you must accept the norms of goodness. This attitude of the self in acknowledging the values of truth, goodness and beauty is an act of faith in universal purposes which rule the time order.

From our standpoint the only sense in which we can speak of eternal values is that there are universal purposes and meanings which maintain themselves and prevail in the temporal flux. In other words the eternity of values means their active perduration through the endless process of change and evolution and their continuing victory, won in part through the service by human selves of the Universal Purpose or Universal Value.

This standpoint I call *teleological idealism*. It accepts, as the *ideal* or *criterion of value*, the harmonious organization of experience in persons. It finds such harmony fulfilled in the development of truth through increasing coherence, in the development of the good through the organization of human interests, in the development of feeling through the fulfillment of aesthetic ideals and personal affections. But it does not admit that the ideal of value is in all its fullness timelessly fulfilled in the shape of a completed reality. It does not admit that the present order of facts is transparently and com-

pletely the fulfillment or expression of value. It finds that the conflict between actual existence, and ideals, between finite fact and value, is real and it is led to suppose that only through continuous activity by selves can this conflict be overcome.

Thus teleological idealism admits the necessity of postulating a ruling principle or ground of values in the universe. It can believe in progress and admit retrogression in the values of life. It knows no absolute but the absolute need that man, if he is to be true to his vocation as a spiritual agent, shall loyally cleave to the service of the ideal values, to the loyal service of truth, integrity, justice, fellowship, the furtherance of beauty and harmony in the world of society and in the inner man. For we know only in part and prophesy in part, and we prophesy in faith according to the measure and urgency of our spiritual needs and cravings.

Teleological idealism does not deny that in special individuals, and at significant junctures in man's history, old values are transformed and new ones created. In fact teleological idealism sees in the religious genius, the moral genius, the artistic and scientific geniuses, in the creative poet, musician, artist, discoverer, organizer and protagonist of higher ideals, special organs through which the common life of man is transformed by the breaking forth, into a new power of creative utterance, of the Universal Spiritual Order, the Ever Energizing Cosmic Meaning of Life.

The problem of the status of value in the universe is the problem of the status of humanity or

selfhood. The idea of God is that of a Supreme Reality or Spiritual Order, in and through which human personality and its values are sustained. God is the cosmical ground of values, the ground of human personality, the Overself which is the source and goal of all selfhood.

The evil is that which thwarts values, which impedes and destroys them. I cannot here enter upon a consideration of the problem of evil. Let me point out that, from the present standpoint, namely that God means the Supreme Principle or Ground of Values and of Personality, the question of the origin of evil ceases to be a question of vital interest. The world is as it is, no matter what were the conditions of its origin. There is no point in crying over the irrevocable past. It could not have been otherwise, either from the point of view of materialism or of teleological idealism. The apparent wastefulness and cruelty of the natural order is to be faced as a fact. These things can be, and are being controlled. Man's inhumanity to man is capable of being remedied. Nature's inhumanity to man has been in part overcome and may be still more successfully lessened, when man's social capacities are better organized and more fully brought into play. From our standpoint we are to regard the defects of nature and the defects of man as challenges to concerted human effort, by which the human values already visioned and acknowledged shall be enhanced and conserved and, in the process, new and richer human values shall be engendered.

Teleological idealism does not imply that there are no forces in the universe hostile to the achievement or conservation of values. It does mean that humanity and its values, being essential features of a universe, which, thus far, is humanistic in character, may endure and win the victory. Thus it is a *rational faith* in human values; *rational*, because values and selves are the offspring of the very universe in which reason lives and works, *faith*, because admittedly we can see but a little way and that not very clearly, along the pathway of humanity in its course through time.

In conclusion it may not be amiss to note the bearing of this position on the traditional arguments for the existence of God. The ontological argument—the idea of God is the idea of a perfect being; the idea of a perfect being involves the existence of such a being; therefore God exists—is nothing more than the putting into the form of a syllogism of the *postulate* of a Supreme Principle or Ground of Values—the Perfect Being. The cosmological argument—that the existence of the world implies the existence of a unitary Cause—has no religious value, except in so far as it is assumed that the world is good and, therefore, its values must have a single source. The physico-teleological argument or argument from the evidence of design or purpose in the structure and process of nature is but a clumsy and round about way of stating the fundamental postulate of life, morality, science and religion, namely that values

are operative and controlling principles in the universal order.

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CHAPTER XXX

THE PHILOSOPHY OF HISTORY

The philosophy of history must be distinguished from the philosophical study of history. The latter consists of reflection upon and generalization from the study, either of special periods of history, or in its widest form, of universal history. Excellent examples of philosophical historians are Ranke, Taine, Lecky and Burckhardt. The philosophy of history is the quest for a determination of the right standpoint from which to view the whole activity of man as an historical and social being. What does the life of man, as an historical being, mean? What ends or values does the historical life aim at and achieve? What is the worth, the purpose, the promise of man's life in time on the earth? Is human history, as the successive generations run their courses, a meaningless and futile tale? Or does man lay foundations, build up values, partially see and achieve ends that are inherently worthwhile, however fragmentary and imperfect their fulfillment at any given time may be? Does the historical life of man imply the further progress and fruition of human values? Are justice, rationality, liberty, humanity, the achievement of fuller individuality and a finer social order, mere dreams and illusions of a being who is inexorably and unconsciously driven on by physical and

economic forces alone? Or does history show, on large scale patterns, the working out of ethical and rational ends? To raise such questions is to indicate that the philosophy of history is the application of metaphysics and ethics to the spectacle of man's temporal life. On the other hand, metaphysics and ethics are enriched, given content, endowed with body and blood, only by bringing their categories down into, and putting them to work in, the concrete life of man. Metaphysics and ethics must draw, from the contemplation, on a wide scale and in sympathetic manner, of the march of man and civilization through time, fruitful suggestions, materials and points of view.

The germs of a philosophy of history are to be found in the writings of Hebrew prophecy (in Isaiah, Amos, Jeremiah, Ezekiel and others) in which the course of nations is for the first time conceived and depicted as controlled by the one divine governing purpose. Jehovah is the ruler of all the nations and he judges them and determines their fates in accordance with the eternal principles of social righteousness and mercy, which are the expression in human society of his holy will. Special privileges entail special obligations and Jehovah judges and allots to Israel its historical destiny in accordance with the measure of its loyalty to the laws of social justice and loving kindness, which he enunciates through the mouths of his prophets. In this connection see especially Isaiah 40: 12 ff., 42: 5 ff., 45: 21-23, Amos 9: 7, and the whole treatment of the relations of the various peoples in Isaiah,

Amos, Micah and Jonah. Israel and Judah must not look for special favors at the hands of Jehovah. He is not their God alone but the God of the whole earth and, indeed, of the whole universe.

This prophetic conception of the moral order of history, that is, of the course of historical change as the working out of cosmically effective principles of social or ethical value, was their solution of the ethico-religious problem which confronted a group of great thinkers who started from the fundamental postulate of an ethical and social religion. Jehovah was believed to stand in a peculiar relation to the people to whom he had made known his true character and who had accepted him by an act of will (the covenant relationship). Now political disaster, conquest and suffering confronts the chosen people. If Jehovah be, indeed, the ethical will who rules the world, these disasters must be the consequence of Israel's disloyalty. The prophets have no difficulty in pointing to the social corruption, the luxury, sensuous indulgence, dishonesty and oppression, that are rife in a luxurious state, as the sins of disloyalty, the continuance in which brings disaster because the Judge of all the earth is holy. This *new* view of the nation's relation to Jehovah carries with it the ethical universalism which sees in the vicissitudes of all the nations the work of Jehovah's will. Assyria is for the time the rod of his anger. Cyrus, the Persian, is his instrument.

The prophetic doctrine of a providential moral order, ruling the course of history and having its consummation in the full establishment of the King-

dom of God, is taken over and further developed, in the light of the belief in Christ as the fulfiller of the prophetic teaching, by the fathers of the Christian Church. It furnishes the means by which the civilization of Greece and Rome are set in their relations to the Hebrew-Christian process of revelation and redemption. St. Paul and the author of the Epistle to the Hebrews philosophize on the relation of Hebraism and Gentilism to Christianity. See, in this connection, St. Paul's Epistles to the Romans, *passim*, and Galatians, Chapters 3 and 5, and Hebrews, especially Chapter 11.

Justin Martyr, Irenaeus, Tertullian and especially Augustine, carry on the work of setting the history of the world in the framework of the Christian religion as the final revelation of God's purpose. Augustine, in his *City of God*, formulates, in comprehensive fashion, for mediæval Christianity the whole providential order of history. The goal of history is the parousia or second coming of Christ, which will mean the complete establishment of the Kingdom of God on earth. The Christian eschatology or doctrine of last things thus supplies the *norm* for the judgment of historical progress.

The Manicheans and Gnostics, heretical sects in the early Christian centuries, conceived the historical process in thoroughly dualistic fashion as a battle of the Gods, a conflict between the cosmic powers of Good and Evil, Light and Darkness, Spirit and Flesh. This dualistic interpretation of history has its roots in the dualism of the Persian religion and in the metaphysical and ethical dual-

ism of spirit and matter which is so prominent a feature of the later Greek and Hellenistic-Roman speculation, especially in the Neo-Platonic school. Augustine was profoundly influenced by it.

From Augustine to Herder one does not find any original contribution to a philosophy of history, except the isolated and unfruitful attempt of G. B. Vico to establish a science of history (*La Scienza Nuova*). Vico struck out the idea of the unity of history and conceived of all history as consisting of series of cycles which, although differing from one another, are all expressions of the "eternal idea of history". The burden of history is the realization of justice. The philosophers of the seventeenth and eighteenth centuries were not interested in history, with the exception of that universal genius, Leibnitz, who in this respect, as in others, is beyond his time. For Hobbes, Descartes and Spinoza and their followers the norms of all knowledge are mathematics and mechanics, the mathematics of the physical order. For Locke and Hume the chief interest lay in the psychological and epistemological analysis of knowledge. For them, too, mathematics was the highest and exactest kind of knowledge, since it dealt only with the relations of ideas. The notion of the gradual growth or evolution of human institutions was foreign to their thinking. Everything social and human was conceived to be a deliberate invention of reason or the result of a voluntary convention or conscious contract. This attitude is not entirely true of Hume.

Kant in his *Ideas Towards a Universal History* does not break away from this type of unhistorical rationalism. He did, however, formulate the idea of progress toward rationality; as did also Lessing (1729-1781), who conceived the historical process of humanity to be a gradual progress in God's education of the race up to the goal, which is full recognition of the religion of the spirit and love, first enunciated in the Gospel of St. John. Herder (1744-1803) in his *Ideas for the Philosophy of the History of Mankind* has a much broader conception. He attempts to bring the whole course of man's development in time under the conception of a law of progress, whose goal is the rule of reason and love in human society. Herder takes account of the influence of geographical and climatic conditions in the historical developments of peoples and gives a place to the operation of the more or less unconscious spirit or soul of a people. The goal of history is the fulfillment of the ideal of humanity; that is, the harmonious development of all the capacities of man into rationality, aesthetic harmony, social freedom and love. This was the ideal of Goethe and Schiller, too. Fichte and Hegel agree with Lessing and Herder in conceiving the course of history to be the progressive realization in human society of rational freedom and love. The goal of man's earthly life, says Fichte, is that humanity, in all its relationships, shall direct its life with freedom and in accordance with reason. Fichte too regards the Johannine Gospel as the first clear enunciation of the spiritual end and meaning

of history. Reason, he says, works first unconsciously as instinct, then externally as the authority of custom and law, and finally, inwardly in the complete insight of conscious and rational freedom. Fichte's doctrine is a metaphysics of history read in terms of his theory of ethical values.

Hegel's *Philosophy of History* is the most elaborately worked out metaphysics of history produced by the school of absolute idealism. In a broad sense, Hegel's whole philosophy is historical, an evolutionary idealism. The dialectic process or development of the full truth and meanings of things through the "might of the negative", that is, the impulse resident in every finite thing and event to pass over into its opposite, and for the opposites to be absorbed into a higher unity in which opposition again breaks forth, this *logic of passion*, is exemplified on the grand scale in the history of human culture. The whole history of humanity is the development of spirit to fully conscious and rational freedom, through the incessant breaking forth, and reconciliation on a higher level, of the oppositions inherent in the movement of spirit through the finite forms of reality. Art, politics and religion, all pass through this dialectic growth, and Hegel threads the whole history of the religious and political institutions of the world on his dialectic framework. The meaning of human history is the progressive realization of the consciousness of rational freedom on the part of man. Rational freedom is attained when there is a recognition of the complete harmony of the will of the individual with the uni-

versal will embodied in the state. It is identical with true morality, for this consists precisely in the conscious and complete acceptance by the individual self of the rights and duties which are prescribed to him by the whole spirit of the state. So freedom is fully realized where custom, law and morality are wholly harmonious. It is in the state that the individual life, family life and the life of civil society, find their fulfillment. History, therefore, begins and ends with the state.

The dialectic of history is the struggle of the succession of state Ideas. "The state is the march of God in history". "The state is the Divine Idea as it exists on earth." In it are found the union of morality and religion. God is the Absolute Reason who governs the world, and the working out of this government is the history of the world. God is the world-spirit who realizes his Idea or Purpose in time. In each successive great epoch of history, one state represents the aspect of the Divine Idea which is then being realized. The struggle between states is the struggle between stages of the Idea.

The victorious state represents a higher phase of the Divine Idea than the conquered state. For example, in the ancient oriental empires of China and India but *one man is free*—the ruler—and he is capricious and despotic. The subjects do not *know* that they are free subjects and therefore are only unconscious subjects. The religions of the Orient, especially Brahmanism, make the Infinite all and man, the finite individual, nothing. Thus

they correspond with the despotic state idea. Greece conquers the oriental world because Greece, particularly Athens, represents a higher stage in the consciousness of freedom and individuality. *Some men, that is the citizens, are free.* Greece gives free play to individuality, and her religion is the religion of the finite, of free and beautiful individualities who express the Greek ideal of humanity. But Greece succumbs because she does not attain the full consciousness of the identity of man as man with the universal, of the finite with the Infinite, of the identity of the individual spirit with the spirit of the social order. In order that this consciousness of the universality of freedom may be achieved, it must appear in the form of *abstract universality*, the abstract power of the universal state. This is the Roman Empire. Christianity infuses into the Roman world the consciousness of the identity of the Divine and the Human, the Infinite and the Finite, in its doctrine of the God-Man. Politically, this consciousness is realized in the modern Germanic world, in which all men are free as rational beings who find the substance of their wills in the complete but free and rational identification of their subjective or personal wills with the universal will embodied in the organization of the state, in which they co-operate as rational members. Thus the goal of history is reached. What remains to be achieved in future time, Hegel does not indicate.

The great personalities, world-historical individuals, statesmen, conquerors and rulers are the chief organs of the universal will, instruments of

the Idea, of the World-Spirit. They pursue their own aims, but the Idea in its cunning uses them as its tools to further its unhasting and unresting movement.

Hegel's conception of history thus differs from the traditional Christian conception in that his Providence is a World Purpose or a World-Idea that is the *wholly immanent* driving force that operates according to the dialectic or logic of history, using the passions and wills of men, the vicissitudes of empires and rulers, to achieve full consciousness of itself, by *an immanent necessity* that admits nothing contingent, nothing that can arrest its resistless progress. Hence, the course of history is the majestic progress of the true and the good in and through all the error and the sin, the passion and pathos, the tragedy and comedy of man's political and social life. The Christian view, on the other hand, regards man as a free and responsible agent who may contravene, although he cannot finally thwart, God's purposes in history.

Hegel's *Philosophy of History* is a combination of philosophical history, in which the facts are often badly distorted to fit his scheme, and metaphysics of history. For Hegel history is the resistless and inevitable march of the Absolute Idea through time, until it becomes fully conscious of itself in the culture of the modern Germanic world and discovers, in the Hegelian philosophy, what it has all meant. This victorious march of the Absolute through time is the metaphysical ground of all culture. It is the progressive realization by the

human spirit of its identity with the Absolute Spirit, which consciousness of itself through the human spirit by the Absolute Spirit is the full and true meaning of freedom. Karl Marx, the author of *Das Kapital*, the socialistic Bible, stood the Hegelian philosophy on its head when he proclaimed that the march of the Absolute through time is the march of economic necessity and every culture factor, every ideological motive in history, is but a sublimation of economic forces. Marx in a one-sided fashion thus called attention to a very important consideration neglected by Hegel, namely the influence of economic factors in determining the course of man's historical evolution. The economic or materialistic interpretation of history has become almost a commonplace since then; but to assert that economic motives are the only ones that rule in history is to take a distorted view of human nature.

Auguste Comte (1798-1857) regards historical progress as due primarily to intellectual causes. There are, he says, three stages in man's intellectual history. In the earliest or theological stage, man explains events by recourse to spirits (animism); in the second or metaphysical stage, explanation is given in terms of abstract metaphysical entities (for example, to explain the effects of opiates as due to a "dormific" capacity); in the third or positivistic stage, of which Comte was the herald, man concerns himself only with formulating the correlations between phenomena, to the end that he may establish social harmony and well being. Comte formulated a polity for the positivistic

society, his social ideal, in which altruism as the supreme motive and the detailed regulation of social life are to be the chief factors. The goal of history is the perfection of man in society, motivated by altruism and directed by positivistic science. Buckle, the English historian, was a pioneer in showing the influence of physical conditions in determining the course of history. He did not, however, deny the influence of mental causes.

Nearly all modern systems of sociology include theories of historical progress. Herbert Spencer, for instance, elaborates at great length the view that society has progressed, and is still progressing, from militarism with centralized organization towards *industrialism* with political decentralization. Some sociologists, such as Gumpłowicz and Ratzenhofer, emphasize the struggles of races and groups for political domination as the chief cause of historical change. Much use has been made of the evolutionary doctrines of struggle for existence and survival of the fittest as ruling forces in historical changes.

Social psychologists or psychological sociologists, of whom there are many today, following Wundt, emphasize the central place of psychical forces, feelings and volitions, in historical change. Wundt holds that the philosophy of history is applied psychology. There are social psychological laws or principles which are illustrated by the facts of history. The sociologists in general hold that there are laws of historical change. Thus they are determinists. But many of them would agree with

Wundt that the laws of historical causality are psychological and thus differ from physical laws. In a physical process there is quantitative equivalence between cause and effect. This is not the case in the psychical sphere. Here the effects differ quantitatively as well as qualitatively from the causes (Wundt's Law of the Increase of Psychical Energy).

A considerable and influential number of writers on the Logic of History, chief among whom may be mentioned Dilthey, Windelband, Rickert, Simmel, Troeltsch and Croce, deny that there are historical laws even remotely analogous to physical laws. They hold the function of history to be the description and interpretation of unique, non-repeatable occurrences. The subject matter of history is the irreversible series of unique non-repeatable events that constitute the historical development of human culture. History does not repeat itself and the historian deals with individualities, chiefly the individualities of culture groups, epochs and movements. The historian employs general concepts and makes generalizations. But these are *teleological concepts* or *concepts of value*. In the selection and interpretation of historical occurrences, it is not merely legitimate but inevitable that the unique members of historical series of events should be related or connected into a systematic interpretation, and this relating takes place in terms of *values* or *teleological principles* of action. For historical events are the expression of the clashing and co-operating wills of men.

In conclusion I will briefly indicate the problems of the Philosophy of History. This discipline has no concern with the determination of the facts of history or their empirical relationships. That is the province of the historian. The consideration of the logical processes or methods and principles of historical investigation and interpretation, and comparison of them with the methods and principles of natural science constitutes the *Logic of History*, an important division of logical enquiry. Inasmuch as the principles of logic have the closest connection with metaphysics, the logic of history is intimately associated with the *Metaphysics of History*. In the latter field, the chief questions are the following: — First, the determination of the system of human values or standards of judgment, in the light of which philosophy can intelligently weigh the questions as to the fact and character of human progress, the growth of culture or civilization. The general problem of progress falls into several divisions—the problem of the nature and fact of moral progress, political progress, economic progress, intellectual progress, religious progress, and their interrelationships.

In the consideration of the problem of progress there are two chief factors to be taken into account; first, the original or biological nature of man. Is human nature modifiable through the inheritance of acquired characteristics? Man's inherited nature is an original datum for all theories of progress and practical efforts towards progress. The changes in the way of improvement and decline in the char-

acter of the social inheritance or cultural complexes, into which the generations are born and by which they are nurtured, is the second factor in estimating progress.

The formulation of the system of values is the critical problem of ethics. Thus the philosophy of history must rest on ethics. On the other hand, the study of history furnishes material for ethics. There is here a logical circle. History is interpreted and judged in terms of a system of ethical values which, in turn, are derived from history. There is no escape from the circle. The philosopher must simply do his best to attain the fullest possible objectivity by the fairest, widest and most penetrating survey of the facts of cultural evolution.

In the past those who have speculated on the meaning of history have usually judged the facts from the standpoint of a standard of valuation arbitrarily assumed or deduced from some theological or metaphysical belief in regard to the absolute or supreme values to be served or won by man. Now, a candid or searching examination of the types of judgment, the conceptions of the good, or the values to be pursued by civilized man, as these are revealed in man's social, political and religious deeds and aspirations and are expressed in his literatures and philosophies, will show that there has been change, growth with improvement in certain directions, perhaps retrogression in others. The ideals of a Greek gentleman, as reflected in Plato and Aristotle, differ quite markedly from those of the best Hebrews of Isaiah's day or of a Greek

Christian or a mediæval Christian. The ideals or values of life for a mediæval Christian are quite different from those of an eighteenth century philosopher and of a twentieth century American. The ideals and values of the latter differ from those of a good Chinaman or Burmese.

A doctrine of ethical and social values or norms of conduct and social organization, which shall be clear sighted and well rounded, must be based on a critical and sympathetic examination of the ideals of life in their historical evolution. The doctrine of ethical values or goods is really a distillation or sublimation of the dynamic trend, the driving purport of the history of man's inner or spiritual civilization. The attempt to construct such a system by abstract rationalizing or even psychologizing can only result in a distorted skeleton.

Ethics cannot be based simply on psychology. For the norms of conduct, which issue demands to the will of the individual and which shape his congenital tendencies, are the products of the evolution of social culture. These norms live and operate, without systematic self-consciousness, in the social atmosphere in which the individual lives. The task of ethics is, by historical and sociological analysis and philosophical construction, to disengage them from the mass of tradition and custom and to organize them into a coherent whole.

Only when this has been done have we a clear and self-conscious standpoint from which to judge the facts of history. Without a systematic theory of moral values educed, by constructive analysis,

from the systematic study of the moral history of humanity, judgments in regard to the fact and meaning of progress, in other words, in regard to the purport of history, can be nothing better than the expression of inherited beliefs, personal prejudices and subjective emotional reactions.

Inasmuch as the historically grounded and systematically organized doctrine of ethical value-judgments remains as yet largely unachieved for contemporary society, a society in transition, it cannot be said that we have the instruments ready at hand for formulating a philosophy of history. And yet, if man is to guide his further efforts towards a better social order and greater individual well-being in the clear daylight of an enlightened and instructed intelligence, a philosophy of history is much to be desired. Certainly the struggles and confusions of the present, the cataclysmic upheavals in the whole social and political fabric of western civilization, constitute an urgent call to scholars and philosophers to devote themselves to the task of clarifying and organizing human convictions on the true ends of human life, the true values to be aimed at and achieved by our social order. We must not go it blindly. We must seek with all our power, and with all the light available, to formulate an ethics of social progress, and that means to formulate an ethical philosophy of history. Statecraft, education, industrial society, stand in urgent need of just this guidance. In this sense philosophy is called upon to be an interpreter of history and a guide to the life of man in society. The need of a

broader-based and more profoundly conceived social ethics is clamant.

In the second place, assuming that we have attained a system of ethical values, a normative standpoint from which to estimate the relative worths of the various stages and factors of historical change; in other words, that we have arrived at clearly defined standards of progress and apply our standards to the factual order of history; a candid examination of the latter order up to the present moment will compel the admission that there is but scant evidence that mankind, taken as a whole, is surely moving towards one universal goal or end. The course of historical change is exceedingly complex and confusing. Certain peoples are stationary for long periods. Others, such as the extreme Orient and the Occident, lived for many centuries without influencing one another. Now that the oriental and the occidental civilizations are in closer contact, it is not clear what the issue of this meeting will be. Even Occidental civilization does not show steady progress in all directions. It halts and even retrogrades. Who would assert that the present world war is not being accompanied by profound ethical retrogression? The occidental man does not seem to have mastered the vast industrial mechanism which he has evoked from the forces of nature to do his bidding. The monster he has created threatens to engulf the finer spirit of life.

Moreover, were it clear that moral and humane progress goes on even through the welter of indus-

trialism, commercialism and war, who are to enjoy the final fruits of the movement? Is it the lot of the living members of each generation simply to toil and suffer and achieve somewhat, in order to hand on to the following generation a heritage of instruments and a nest of problems, with and at which that generation, in turn, will labor, to pass to the grave and be forgotten after a brief toil at an endless task; one which is never done, but continues and changes throughout the centuries and the aeons without final goal, without enduring results in human values? Either humanity, as it toils in history, is engaged in an endless and goalless task and then progress is a self-contradictory notion; or the goal is to be reached by some far off generation, and then all the preceding generations will have been mere hewers of wood and drawers of water to serve the welfare of the final happy one; or there is, in the lives of each generation, as it toils and suffers and aspires in the living present, an inherent value and then, since this value is only in part achieved by it, must we not postulate, if our ethical and humane values are to retain their validity and dignity, a continuous existence and progressive fulfillment of value for the life of man beyond the visible bournes of the present time and space? Does not the supremacy of ethical values imply the immortality of the generations?

Furthermore, while the individual lives a worthy life only in so far as he co-operates manfully in the social work of his own day and place as a member of the community, the nation, the

group in which his calling and election give him membership and, in the widest sense, in the work of humanity, the individual life which alone feels, thinks and wills, alone knows the bitterness of defeat, the joy of achievement, alone feels the sorrow and the happiness of the common human lot, is the actual agent and embodiment of ethical values. How, then, can ethical values endure and grow if individual souls are, in the final outcome, but dust and ashes thrown on the cosmical scrap-heap by the winds and tides of the blind cosmical weather?

Thus, the final issues raised by ethics and the philosophy of history are the issues that lie, and have always lain, at the heart of man's whole practical and affective life. These are the issues out of which arise the cry for a religious world view, and assuring answers to which the genius of religion does and has always aimed to give. For religion, at its best, is the consecration of the highest human values; it is the affirmation in faith and deed that these values are integral constituents in, or essential qualities of, the universal and enduring order; that the higher meanings and purposes of the human spirit are blood kin to the supreme meaning and Purpose of Reality.

An interesting and important application of these problems arises in connection with the ethics of the state, the most comprehensive and powerful form of social organization. What ends does and should the state exist to serve? Is there discernible, in the light of ethical values, any line of political progress in history? Should the state be ordered

so as to promote primarily the universal self-realization of the mass of mankind, to enable all individuals to attain and enjoy a fair measure of physical and mental well being? If so, what is a fair measure of well being? Should the means to develop and exercise exceptional abilities and achieve distinguished results be denied the comparatively few in the interest of a moderate average of well being for all? Or are both aims possible of realization? In short, can the democratic and the aristocratic ideals of social order be reconciled? If so, how? Which is more nearly in accord with the highest ethical values, well being and enjoyment made cheap and accessible to every one, or a political and industrial organization that aims primarily at producing the highest results in art, science, literature? Or can these two ideals be realized simultaneously in the same social order? To seek an answer to these questions is to formulate a system of ethical values by which history and the present social and political orders are judged.

Or are, perhaps, the Buddhist, the Neo-Platonist, the quietist, the contemplative mystic, right in holding that the only permanent peace, the only lasting values, are to be attained by escaping from the roaring loom of time to the calm haven of unruffled contemplation and mystic union with the One Changeless Absolute in whose presence all the fretful stir unprofitable and the fever of this jarring world are seen to be illusion?

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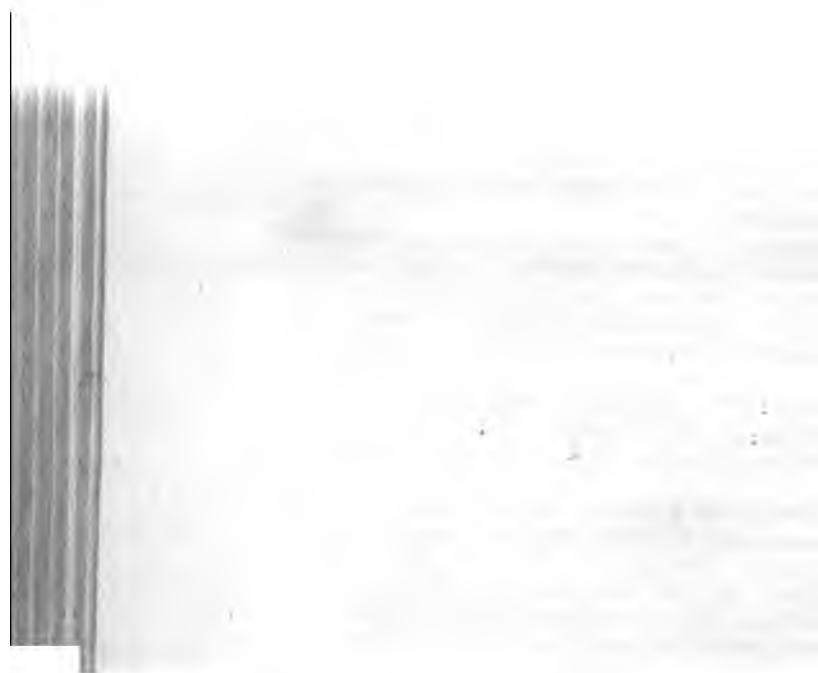
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APPENDIX

(387)



APPENDIX

CURRENT ISSUES IN REGARD TO CONSCIOUSNESS, INTELLIGENCE AND REALITY.

Among current philosophical tendencies, of those laying claim to novelty the most significant are: The New Realism, which is an epistemological reaction against idealism; Neutral Monism, which is a metaphysical theory fathered in part by representatives of the new realism and which claims to circumvent the time-honored standpoint of dualism by recourse to a new theory of identity or qualitative monism of being; Instrumentalism, a further development of pragmatism, which, while stressing the practical and empirical function of the intellect, emphasizes its active and creative character and would have us forego the quest for an ultimate reality, insisting that the only useful function of thinking is the organization of the empirical flux; and finally Irrationalism, which, in Bradley and James and still more emphatically in Bergson, proclaims the powerlessness of intellect or reason to apprehend the true character of reality and offers in its place a doctrine of feeling or intuition as the way to direct contact with the essence of reality. We shall now discuss briefly these movements.

1. THE NEW REALISM.

This term includes a variety of standpoints. For instance S. Alexander's statement of it is one that seems to differ chiefly in terminology from the standpoint of such objective idealists as Bosanquet. B. Russell states a type of new realism which finds a place for the idealistic contention that what we know immediately are sense data and that the objective world of matter of the physicist is really an intellectual construction. Russell recognizes fully that

the activity of the Ego or knowing subject is a non-eliminable factor in knowledge of the world of sense and that the world of physics is an intellectual construction. Thus Russell is a dualistic so-called neo-realist. Some of the American neo-realists approach closely to the standpoint of naive common sense in their assertion of the complete independence of the objects of knowledge over against the subject or knower (e. g., R. B. Perry). Others hold, apparently, that reality is energy (Montague) or a strange world of logical entities (e. g., Holt). It is not possible to discuss here all the variants of this doctrine, some of which have not much in common except the name. I shall, therefore, confine myself to a brief consideration of the more salient and significant features of the movement.

The New Realism involves two positions (a), the objects known are independent of their being known; (b) logical and metaphysical pluralism, i. e., reality is not a system or whole of interrelated entities, but a mere aggregate of many entities some of which are interdependently related to some but not each to all the others.

With regard to the first position, the new realist argues that the idealist is guilty of equivocation in his use of the term "experience". "Because what I experience seems to me real and I am the experient the idealist argues," says the new realist, "that all reality is experience and therefore dependent on an Ego. Because everything known is thus far related, by the act of knowing, to an Ego, therefore the being of everything known is only being for an Ego. The idealist thus begs the question and calmly assumes that, since a thing known is in the knowledge relation, therefore that thing's being is dependent on a knower. This criticism is doubtless valid against some forms of idealism, but not against the spiritualism or idealism of Leibnitz, Hegel, Green, E. Caird or Bosanquet. For these men do not argue that, since perception or experience is the state or act of an Ego, therefore all being is the state or act of an Ego or experient. The gist of their argument rather is that, since the organization of experience involves relations and

since all that reality can mean for us men is a system of progressively organized experience, reality must have a rational structure or texture and therefore is to that extent related to mind or thought.

Certainly in the very act of knowing an object (whether that object be a physical thing or a scientific principle), it is implied that the object known is distinct from the act of knowing. Even in knowing my own psychical processes *I*, as knower, am distinct from *me*, as known. Furthermore, by the reality of a physical thing or the truth of a scientific law as recognized by me, I do not mean that I have made the thing or even the law that I now know out of whole cloth or out of nothing. A physical object, if real, must have being independent of its being known by you or me. A scientific law is not a law if it be valid only for my mind, not even though I am its discoverer. But do we not mean by an objectively real physical object one that is accessible to all normal percipients under standardized conditions of perception? And do we not mean by a scientific law a principle that would be recognized as true by all normal minds working under the same conditions? That there are real physical energies which operate when no finite knower is perceiving them I do not question. It seems to me in the highest degree improbable that any finite knower is now perceiving what is going on in the center of the earth or of the sun. These regions exist as inferred and real objects of possible experience. And when we ask *what* these energies or objects are, when we attempt to determine their natures, we can only do so by a logical and imaginative construction based upon experience. It is impossible to say anything significant about any part of reality without direct or indirect reference to *reality as experienced* or *as constructed from experience*. Therefore the attempt to know or define any aspect or region of reality involves reference to experience. Further, the attempt to conceive the most remote region or recondite and microscopic quality of the real involves the assumption that it is intelligibly continuous with experienced reality, that the non-experience-

able and imaged reality is an element in the whole system of reality. Thus any meaningful assertion or speculation about any bit of reality implies its possible presence to some experient or thinker and its actual membership in the intelligible or rational and coherent structure of reality.

The other chief tenet of new realism is logical and metaphysical pluralism — reality is an aggregate of entities many of which may be in no relation to many others. This doctrine is a reaction from the misuse made of the so-called doctrine of the internality of relations, namely, the doctrine that since all relations are internal to the terms related (otherwise it is claimed the terms would not be really related), therefore all finite beings are really parts of one all-inclusive being. We can think of many entities that have no relevant interrelations so far as we can see. For instance, I see no relevant relation between the flavor of the apple I have just eaten, the beard of Hammurabi and Fuchsian functions in mathematics. So far as I am concerned the interrelations of these three entities are so negligible as to make the terms external to one another. Still these three entities are all parts of the same universe and must have some sort of spatial, temporal or logical connections. If I were an omniscient being doubtless I should see those connections. One's recognition of relevancy of spatial, temporal, causal, quantitative, qualitative or teleological relations between entities is relative, not merely to the limitations of one's actual knowledge but relative also to the character of one's purposes. An abstract logical or mathematical relation may be very significant to Mr. Russell and meaningless to Von Hindenburg. There must be an indefinitely numerous variety of degrees in the relevancy of relations and there certainly are many variations in the relevancy of relations to the purposes of human knowing. Moreover, since reality is dynamic, is process, relations change. Old ones disappear and new ones arise. Nevertheless, in so far as it is a universe or cosmos in which we live, even the rises and disappearances of relations must be themselves cases of relations that are somehow,

somewhere, sometime, relevant to other terms and relations. If we take literally the doctrine of the pure externality or pluralism of relations, we have not even "a world of tiny absolutes" as Bosanquet puts it, but a chaos of tiny absolutes and, since each of us is either a part or whole of one such absolute, we could not even know that there is a chaotic plurality of absolutes. We are elements in a *uni-verse* no matter how little we may know about our places and destinies therein. Relations do not make the entities which are related mere parts of one inclusive entity, but relations are *relevant* to the *natures* of the terms related and the *natures* of the terms are relevant to the relations. For example, the character of a man is relevant to the societies he belongs to and, *vice versa*, the character of the social relations are affected by the *natures* of individuals in those relations.

Marvin (History of European Philosophy, pp. 413-421) gives a quite different statement of the neo-realistic standpoint. He asserts that neo-realism discards entirely the traditional notions of *substance* and *cause*. It substitutes for the concepts of *physical* and *mental substances* or *stuffs* the concepts of concrete realities as having determinable *structures*, and by *structure* it means *relations between parts or organization*. Different entities have different types of structure or systems of relation. The human mind has a definite and discoverable structure and the body has a different structure. The difference between the physical and the mental is a difference *solely of relations* and not a difference of stuff or entity. And, in place of asking how mind and body interact causally, neo-realism asks, *what are the functional relations between the two structural systems?* Certainly, the business of science and philosophy is to determine and formulate the chief types of structure, organization or systematic relationships in things, and the relations of these types to one another. If this be neo-realism we must all be neo-realists. In so far as one means by *substance* a *homogeneous and unchanging stuff*, he is employing a notion that belongs to the childhood of thought. But

are not parts, relations, structures, organizations or systematic connections, entities or realities? Have they not being and, in many cases, dynamic being? They are as they do and they do as they are. Certainly, too, the relation of mind and body is a case of functional interdependence. Knowing and willing are functions of two variables — two systems in one system? But what *sort* of function? Surely there is a profound difference between a purely logical function of timeless implication, as when we say, for example, that the area of a circle is a function of its radius, and an efficient physical or teleological function! When one says that the distance the water from a garden hose will carry is a function of the angle at which the nozzle is held, that is only a part of the truth. The distance is also a function of the water-pressure and this is a *dynamic* factor. When one says that the amount of patriotic service that a citizen will render is a function of his intelligence and character as affected by the social spirit of his community and nation one is dealing with dynamic and teleological factors, with temporally operative energies and agencies; in short, *with causes in distinction from logical and timeless systems of implications*. This brand of neo-realism is not realistic enough. It has a tendency to evaporate the dynamic and temporal reality into a timeless system of logical and mathematical implications. It runs into a pure *logicism*. It supplies one more instance of that confusion between actual causation, as a dynamic and temporal process of interaction or relevant and efficient interrelation between individual elements, and the notion of a timeless system of logical implications, which one finds in Spinoza and which recurs even in Bradley and Bosanquet. Thus absolute idealism and neo-realism join hands in the same error.

The ever-recurring controversies and misconceptions which arise from the equivocal meanings of the terms "idealism" and "realism" suggest that it might be better to discard their use altogether, and to call our standpoint "rationalistic" or "organizational experientialism". Briefly, this standpoint involves the following propositions: — (a) Things

perceived are selected and organized groupings of sense-qualities in relations; such relations as spatial, temporal, numerical, qualitative (degrees of likeness and unlikeness), quantitative (equality greater, less, etc.), dynamical (physical, purposive). (b) In knowing, true relations are *discovered*, not *made* by the mind; in willing, man does, to a limited extent, *make* new relations. (c) The known world, as a complex of things and events in relation, involves three factors: (1) the mind, with its definitive structure history and interests; (2) the physical or "objective" grounds of perception; these I conceive to be energy-complexes; (3) the central nervous system and the sense-organs, which are at once parts of the physical order and the immediate basis of the mental processes of perception, etc., and hence are the intermediating links between the mind and the rest of the physical world. (d) Percepts are not copies of things but partial and fragmentary aspects or "views" of the real external world selected by the mind and the sensory system. (e) The mind is the "ultimate" active selective and analytic-synthetic principle which discovers and takes note of qualities-in-relation, and which constructs and organizes a larger context of reality, in which it sets and interprets the immediate data of experience. The relation of a perceived thing or event or even a scientific law to reality is that of a partial selected and interpreted aspect or fragment of an indefinitely complex totality of things, processes, qualities and relations. Reality involves much more than any experience, but that "more" is a construction by the human mind from the structure of actual experience and the nature of the construction is determined by the joint natures of the experienced reality and of the mind's own structure. (f) In error and illusion the mind misinterprets or places in its wrong setting some bit of experience or generalization from experience. It may either fail to determine and analyze the data correctly or it may fail to set the data in the right connections with other items of reality. There can be no unreal experiences, only untrue, i. e., wrongly related, experiences.

2. NEUTRAL MONISM.

This doctrine owes its recent developments to the essays of William James: *Does Consciousness Exist? A World of Pure Experience*, etc., collected together in his *Essays in Radical Empiricism*. Intermarried with neo-realistic logical pluralism it has given birth to some marvellous neutral progeny, especially the monism of Holt in the *Concept of Consciousness*. It has affinities with Avenarius' concept of Pure Experience and with the sensationalistic phenomenalism of Ernest Mach.

James proposed to get rid of the duality of consciousness and its objects by taking a radical step and thus rightly called his doctrine "radical empiricism". He says there is no such entity as consciousness. The standing assumption of common sense is that there is a duplicity in experience — knower and known, thought and things. James says "*Experience, I believe, has no such inner duplicity;*" "*thoughts in the concrete are made of the same stuff as things are*". "The instant field of the present is at all times what I call 'pure' experience". The sum total of all experience "*is a that, an absolute, a 'pure' experience on an enormous scale, undifferentiated and undifferentiable into thought and thing*"; "*experience as a whole is self-containing and leans on nothing*". It is "*the selfsame piece of pure experience, taken twice over, that serves now as thought and now as thing*." I am writing at a desk. The paper, the desk and the pencil are bits of pure experience. If they are taken in their spatial relations in the house, they thus become physical things; but, if they are taken as items in my personal biography, they thus become thoughts. As virginal experiences they are neither thoughts nor things,

¹ See especially *Essays in Radical Empiricism*.

² *Essays in Radical Empiricism*, p. 9.

³ *Ibid.*, p. 37.

⁴ *Ibid.*, p. 28.

⁵ *Ibid.*, p. 184.

⁶ *Ibid.*, p. 193.

⁷ *Ibid.*, p. 27.

and their being taken as either the one or the other is an addition to their original natures as just pure experiences. As for the relations which seem to do the taking and thus the dualizing or dichotomizing of the world of pure experience, they too are experiences of transition which no Ego has or makes. They just happen. The relations are empirical data like the substantive bits of pure experience between which they are transitions or passages.

This seems a beautifully simple way of circumventing all the difficulties which arise from the duality of Ego knowing and object known. It solves the problem of the self by saying it consists of certain transitional experiences. Consciousness becomes a clumsy and misleading name for certain empirical groupings. There is no longer any problem of mind and body on our hands, since mind and body are merely the same pure experiences connected by other pure experiences of relation or transition. Knowing, affection and willing consist of certain transitional feelings and material movements consist of other transitional feelings. No Ego feels the feelings or knows the knowledges. All things flow and all things, including the rates and kinds of flowing, are simply experiences. A personal history is simply an experience of continuous transition.

James' doctrine has been taken up by certain American neo-realists, especially by Perry and Holt. According to the latter, the world consists of *neutral elements*, i. e., elements that are neither physical or psychical. These elements are numerically many but qualitatively of the same substance. They are *logical* "terms" and "propositions", but active and generative of more complex entities. These elements constitute an indefinite variety of complexes, since they may enter an indefinite variety of group or class relations. They are the foundation stones of the universe. Mind is a class or group of neutral entities, as a physical object is another class or group. A mind makes a cross section of the world which is always a group of the neutral components of the object and its immediate relations. Consciousness is any part of the field of neutral entities that is

illuminated. Mere illumination makes no change in the natures of the entities. They may exist the same in relation and out of relation to consciousness. Consciousness is like a searchlight that plays over the entities⁸. The work of selection and illumination, which results in consciousness, is done by the central nervous system⁹. The processes of the nervous system are of a mathematical and neutral structure¹⁰, like all physical processes. Holt would even define a collision between two railroad engines as a contradiction between two groups of logical entities. In short, reality is resolved into an unearthly ballet of bloodless terms and propositions. Neutral monistic realism thus turns around into a pluralistic logicism.

Neutral monism seems to be but a philosophical aberration for the following reasons:

(1) It can offer no explanation of why we should make a distinction between consciousness and its objects, between knowing and the thing known, without invoking the nervous system as the real agent. Much less can it account for the fact of self-consciousness. Can a searchlight search for its own searchings?

(2) It cannot account for the felt difference between perception of objects as present to the percipient and imagination of objects not so present.

(3) It cannot account for memory since the latter involves the conscious continuity of the self.

(4) It cannot account for error. If consciousness be but the passively illuminated field of objects selected by the central nervous system, how can there be wrong judgments? The theory of error requires the assumption of an active thinker.

(5) Since consciousness is the illuminated field of the *present*, how can one believe in *non-temporal* propositions such as those of logic, mathematics and natural science?

⁸ Holt in *The New Realism*, p. 352 ff.

⁹ Holt in *The New Realism*, p. 352 ff., and Perry, *Present Philosophical Tendencies*, p. 299 etc.

¹⁰ Holt, *The Concept of Consciousness*, p. 255, etc.

(6) Neutral monism involves psychological atomism. The self is resolved into an ever shifting phantasmagoria of neutral entities selected by the brain.

(7) Since the brain is the real selective and attentive agency, the searchlight that makes the illumination which is consciousness, *neutral monism is but a new and specious name for materialism*. It has no right to be called *neutral monism*.

James' standpoint of radical empiricism is simpler and not open to all the above objections, because it evades all troublesome problems as to *how* the "inner duplicity" arises in experience and would make philosophy a mere description, without analysis and reconstructive interpretation, of the flux of experience. James fails to offer any account as to why or how it happens that identically the same bits of experience get taken, respectively, in physical and personal contexts of relations. Personal biographies, appreciations, judgments, feelings, volitions just appear and disappear mysteriously, hither and yon in the flux of experience. It is simpler and more reasonable to admit that experience involves an experiencer, and, hence, a self, especially in view of the fact that one is not only conscious but may be conscious of one's being conscious, i. e., be selfconscious.

3. THE INSTRUMENTALIST VIEW OF INTELLIGENCE.

In the latest development of pragmatism in the hands of John Dewey and his school, and to which the name instrumentalism is frequently given, the Jamesian conception of the flux of experience is a characteristic feature. Dewey insists that we should abandon the old problems of the relation of knower and known, the self and nature, mind and body, freedom and determination, the one and the many, the problem of evil, etc., and turn philosophy into an instrument for the better organization of human experience and activity by making it a tool for solving practical, social, educational, political and personal problems. The time honored problems and theories of metaphysics he thinks are evaporating. The

truly useful and creative function of intelligence is the enrichment and harmonization of man's individual and social life, and we are to take experience at its face value. Everything is what it is experienced as. But Dewey lays great stress on the active organizing function of intelligence as enhancing the values of experience. He seems to regard it as the chief instrument of human progress and individual as well as social welfare. Thus, while James seeks pragmatic justification for the contemplative side of life as found in religion, especially in mysticism, Dewey's standpoint is more that of a crusader on behalf of the practical, and especially the social, efficacy of intelligence. Bergson reduces intelligence to the level of a mere tool for action on matter and has recourse to intuition to satisfy man's passion to experience reality. Dewey elevates intelligence to the place of the supreme instrument which will enrich the whole of human life, while he seems to deny the value for life of the investigation of the classical problems and theories of philosophy in the past.

In short, while for James, Bergson and Dewey, reality is flux and intelligence is a biological instrument to improve human behavior and the behavior of non-human nature, James and especially Bergson offer, in immediate experience, feeling or intuition, a way of escape for the romantic longing of man, his metaphysical craving for the experience of union with the universe; whereas Dewey apparently would have man give all the energies of his intellect to control and adjust himself to the flux of experience in which he lives and of which he is a part, thus relegating the problems of ultimate reality and man's place in it to the position of adolescent dreams left behind by the mind that has attained intellectual maturity.

The conception of intelligence as an active organizing principle is the last remaining legacy of the objective idealists, from Plato to Hegel, which our newest instrumentalists have preserved. But surely the successful operation of intelligence as an instrument of control or successful behavior in a world implies that the world is, at least

to a predominating degree, of similar structure. Mind can make itself at home in a universe only if the latter be in some sense a rational order. Moreover, it is a narrow and unjustifiable limitation of the function of human intelligence to say that it exists only to exercise practical, technical, social and volitional controls and invent make-shift adjustments between human emotional and biological needs and the daily and hourly flux of experience. The functions of consciousness and reason are not exhausted in meeting novel situations and controlling behavior by a reference to the future. When I am engaged in aesthetic contemplation of nature or art, when I am enjoying the companionship of a friend, when I am contemplating the logical symmetry, beauty and impersonal grandeur of some scientific or mathematical construction, when I am living in some significant period of the past, for example Elizabethan England or the Athens of Pericles, when I am following the career and feeling myself into the life of some one of the race's worldly or spiritual heroes, my consciousness, keen, vivid and expanding, may have no reference to my own future behavior or that of anyone else. The human spirit lives not by deeds of adjustment to external and future situations alone. It lives deeply in pure contemplation and free imagination. The instrumentalist errs by taking one important function of conscious intelligence and making it the sole function. Disinterested contemplation and enjoyment of the beauty, grandeur, meaning and order of things for their own sakes are for some human beings inherently worthwhile functions of consciousness. The philosopher, like Kipling's world-wanderer, is moved by the passion "For to see and for to admire" the universe. To become, in however modest degree, the spectator of time and existence is a native human longing which philosophy exists to satisfy. Nothing is more truly a mark of the distinctively human life, nothing in human life gives more worth and poise, more inner strength and unshaken fortitude to life than the attainment of a contemplative insight in which the intellect's thirst for a reflective vision of reality is slaked, in which the *thinker* becomes, in however imperfect measure, consciously at one

with the order of the universe. The truest mainspring of science and philosophy is not the discovery of "get-rich-quick" methods in either industry or social organization. Philosophy is more than a good economic, political, social or even pedagogical tool. Even to make the economic and social needs of the proletariat the chief guide to its ruling aims and methods will be to ruin philosophy. The theoretic or contemplative life is the crown and guide of the truly human life. The rational life is the coherent and harmonious life, in contrast with the random and disjointed life of

blind feeling and impulse. Universality of meaning, harmony, organization into a coherent system—these are alike notes of the most true in science and of the highest type of social order and individual life. The mainspring of science and philosophy is the quest for a coherent and harmonious life, including a coherent insight into the meaning of life and the nature of things. Reality is more than reason, but without reason, without disinterested contemplation, without a life that seeks the reflective insight into the ordered totality, the coherent organization of the real, the deepest meanings and values of reality do not come into the possession of man. The truly human part of man is the rational and spiritual power in him which has fashioned and is ever fashioning, out of the materials supplied by nature, an objective rational order of social, moral and spiritual life; and which creates science, art, religion and philosophy, not for the satisfaction of man's belly needs but in order that reason and the creative imagination may find themselves at home in the spiritual universe.

The danger of over stressing the instrumental character of intelligence lies in covertly assuming that, since intelligence or reason is a practical instrument of behavior, it is nothing more. The instrumentalist *a outrance* condemns all pure speculation and contemplation, all imaginative musings over the problems of metaphysics and theology. He demands that philosophy come down into the market place, roll up its sleeves and go to work to prove its utility like the farm tractor or any other piece of human invention. He voices the severe utilitarianism of the practical American, especially the Middle-Westerner. Well, I will risk the

prophecy that, when our boasted nineteenth century industrialism and scientific and materialistic commercialism have tumbled down about our ears, we shall have to turn, from cunningly devised empirical and mechanical panaceas for social, educational and political reconstruction, to seek the guidance of an idealistic philosophy and the inspiration of a simpler type of ethical and rational religion. Only the acceptance of universal and ideal values will save occidental civilization from ruin.

4. IRRATIONALISTIC INTUITIONISM.

Bergson conceives of the power of intelligence as rigidly limited to dealing with inorganic solids, with mere matter. Intelligence is able only to comprehend and formulate abstract geometrised equations of identity. It turns the mobility, warmth, manifold heterogeneity, individuality, creativity and freedom of the *life-force* into frozen concepts, into inert, motionless and skeletal travesties of the rich and ever moving reality. Life for him is ever active and creative, reason is static and uncreative. Thus life, which is reality, transcends thought. The *vital impetus*, creative, mysterious, unpredictable and uncontrollable, is the power which moves the world. Reality as life is not only incalculable and inconceivable in its secret tendencies, movements and results; its secret essence can not be communicated, for language, an instrument of intelligence fashioned to meet the exigencies of social intercourse, is utterly powerless to express the multitudinous variety and novelty of life's manifestations. Words are pale and colorless abstractions, little more than geometrical marionettes. Thus intelligence trails along helplessly in the wake of life, picking up superficial uniformities and overlooking the spontaneous diversities and novelties with which life teems.

But Bergson recognizes that the metaphysical thirst of man for contact with reality must be slaked. Intuition or the immediate feeling of, the direct listening to, the face-to-face vision of, our inner selfhood is the key to reality. In the supreme moments of life, in great passional and volitional crises, when man feels his whole personality surging

ing up from the deeps or feels that he is putting his whole self into an act: "Intuition is there however vague and above all discontinuous. It is a lamp almost extinguished, which only glimmers now and then, for a few moments at most. But it glimmers wherever a vital interest is at stake. On our personality, on our liberty, on the place we occupy in the whole of nature, on our origin and perhaps on our destiny, it throws a light however feeble and vacillating, but which none the less pierces the darkness of the night in which the intellect leaves us". The function of Philosophy is to unite, to deepen and dilate these evanescent intuitions and thus to enable man to lay direct hold on reality.

Thus Bergson is a reviver of romanticism and mysticism. Reality must be directly perceived or felt, by an immediate contact or union of the contemplating soul with the reality contemplated. If Bergson means that there must be immediate data of experience at the basis of all genuine knowledge, thus far he is right. He is right, too, in holding that the data for the understanding of the nature of the self and of all psychical and spiritual life must be found in the living contemplation of the Ego's own life. I can only understand and appreciate another Ego by recreating his experiences and attitudes within myself. The key to the meaning of life is to be found in the experience of living. But Bergson's conception of intelligence is altogether too narrow. Intelligence is not tied-up to abstract spatial forms. It does not traffic alone in barren identities, static formulas and concepts. It has other modes of operation than geometry. The business of intellect is to interpret and organize the data of experience. These data have connections, relations, meanings, and, thus, are intelligible. If diversity, novelty, dynamic change, increasing individuality and freedom are facts, the intellect does not commit suicide in recognizing them nor does it try to reduce them to a dead monotony and colorless sameness. The intellect operates in this variegated moving world. Science is organized common-sense and philosophy is common-sense and science

organized and interpreted as completely as possible. The intelligence is the power of reflectively organizing the perceptions, the impulsions, the deeds, the feelings, the valuations of the self and of so interpreting and interrelating the whole life of the self in its organic interplay with nature and humanity; so that thereby our impulses become dynamic elements in a harmonious personality, so that thereby our deeds take on a social and universal significance, so that thereby our dumb and blind feelings learn to speak the language of reason and become refined and transformed into the higher sentiments of a well articulated personality, and so that thereby, too, our valuations as the guides to our deeds and the finest fruits of our experiences become the universalized and harmonious instruments by which the individual self at once comes into fuller self-possession as a richer and more significant personal unity and comes into fuller union with man, with nature and with the universal order. Perhaps this is what Bergson means; but it is unfortunate that he plays into the hands of irresponsible irrationalism and emotionalistic mysticism by offering us, as a foundation for his metaphysics, such an erroneous, ridiculous, wooden-image travesty of intelligence or reason. By all means we must seek reality first-hand in living, in acting, in feeling. But by all means, if the universe be not a crazy patchwork, or a madhouse, we shall find our true selves, we shall understand and control nature and we shall organize our lives into richer and more meaningful internal and social harmony and attain union with the universal meaning of things, only by the unremitting exercise of the analytic-synthetic, organizing and interpreting activity of intelligence.

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INDEX

- Abelard, 137.
 Absolute, The, 119 ff., Hegelian
 conception of, 210, 212 ff., 268.
 Academy, 44 ff.
 Achilles, 36, 102.
 Acosmic, 207.
 Adaptation, 244.
 Aesthetics, 5, 239 ff.
 Alexander the Great, and Aristotle,
 77.
 Alexandria, 118.
 Alexandrian Schools, 96.
 Amos, 265, ff.
 Analogy, argument from, 26.
 Anaxagoras, 38, ff.; on multiplicity,
 38; on substance, 39; relation to
 animism, 40.
 Anaximander, 30 ff.
 Anaximenes, 272.
 Anselm, 136.
 Apologists, 128.
 Aquinas, 137; 138, 140, 144.
 Archimedes, 133.
 Arguments of Zeno, 101; for skep-
 ticism, 102 ff.
 Aristophanes, 46.
 Aristotle, on science, 2; criticism of
 Plato, 64; theory of knowledge,
 77 ff; on universals, 77; on de-
 velopment, 79; on efficient cause,
 80; on soul, 80; psychology of,
 80; on soul and body, 80 ff;
 theory of knowledge, 82; on
 sense perception, 83; definitions,
 83; theory of reality, 85; 138, 152,
 185, 186, 249; on categories, 270,
 272 ff, 316, 338, 365, 378.
 Arian heresy, 129.
 Arrow, 36.
 Assumptions, 104.
 Athanasian doctrine, 129.
 Athens, 4, 118.
 Atomism, 37, 87; in science, 91; its
 fruitfulness, 95.
 Augustine, Saint, 131, 134, 267 ff.
 Aurelius, Marcus, 109.
 Avenarius, 206.
 Axiology, 220, 246.
 Bacon, Francis, 294.
 Bacon, Roger, 128, 148.
 Beginnings, 290.
 Berkeley, on idea, 61; 149, 156, 169,
 178 ff., 253, 272, 356.
 Bergson, 66, 156, 158, 228, 242, 245,
 249, 389, 400, 408 f.
 Boethius, 136.
 Bosanquet, 156, 157, 188, 210, 253,
 357, 389, 394.
 Bradley, 156, 157, 188, 304, 210, 215,
 219, 320, 357, 389, 394.
 Brotherhood, universal, 111; Pytha-
 gorean, 116.
 Browning, 148.
 Bruno, 149, 119.
 Brühl, 119.
 Buddha, 122.
 Burckhardt, 264.
 Büchner, 156.
 Byron, 136.
 Caird, E., 188.
 Calkins, 219, 254.
 Carneades, 99, 100.
 Causation, 296.
 Cause, final, 68; efficient (Aristotle),
 80.
 Causality, original form of, 22; its
 relation to magic, 22; of ideas,
 63; 201, 273 ff.
 Certitude, 100.
 Chalcedon, 130.
 Change, Heraclitus on, 33 ff.; self
 initiated, 265.

- Chaos, 79.
 Christ, 143.
 Christianity, 124; ethical content of, 126, 127; its origin, 127; 249, 252.
 Chrysippus, 109.
 Church, Jewish, 125.
 City, of God, 367.
 Civilization, Mediterranean, Greek, 29.
 Cleanthes, 109.
 Clearness, 105.
 Classification, in Plato, 58.
 Community, the Beloved, 204.
 Communion, 110.
 Communism, in Plato, 73.
 Comte, Auguste, 374 ff.
 Conduct, problem of, 41.
 Conservation, of Value, 246.
 Conservatism, in Athens, 46.
 Contemplation, 88, 401 ff.
 Concept, 145.
 Continuum, 200.
 Contradiction, 36.
 Copernicus, 152.
 Cosmogonies, Greek, 20.
 Cosmology, 330.
 Cosmic soul, 120.
 Cosmos, 284.
 Cratylus, 105.
 Creation, Plato's theory of, 68.
 Creativity, of reason, 81, 245.
 Criteria of truth, 314.
 Croce, 376.
 Culture, Mediaeval, 135.
 Culture system, European, our relation to it, 23.
 Cusa, Nicholas of, 143.
 Cycles, 37.
 Cyclic process, 246.
 Dante, 143.
 Darwin, 84, 230, 234 ff.
 Death, 17.
 Demiurge, 68.
 Democracy, 75.
 Democritus, 37, 90, 272.
 Descartes, 113, 149, 151, 156, 160, 169, 171, 252, 261, 294 ff., 316, 363.
 Determinatio, 200.
 Determinism, 263 ff.
 Development, 79, 85; of civilization, 26.
 Dewey, 317, 321, 399 ff.
 Dialogues, 121.
 Dilthey, 376.
 Dithelietism, 131.
 Divisibility, 36.
 Docetic, 130.
 Doctrine, chemical anticipated by Anaxagoras, 39.
 Double aspect theory, 191 ff.
 Driesch, 241 ff.
 Dualism, 156 ff., 261.
 Duality, in unity, 130.
 Duns Scotus, 136.
 Durkheim, 287.
 Duty, Stoic conception of, 111.
 Eclectics, 117.
 Education, 70.
 Effulgence, 120.
 Ego, 253.
 Elea, 85.
 Elements, the four, 37; Anaxagoras on, 38.
 Emerson, 175.
 Empedocles, 37.
 Energy, conservation of, 160 ff., 176.
 Entelechy, 78, 252.
 Epictetus, 109.
 Epicureanism, an atomism, 90, 109.
 Epistemology, its problems, 293 ff.; 330.
 Erigena, John Scotus, 136.
 Error, problem of, 36.
 Ethics, nature of, 5; in Plato, 70; 336 ff.
 Eugenics, in Plato, 75.
 Euthanasia, 356.
 Evidence, self, 105.
 Evolution, problem of, 230; definition of, 231; aspects of, 239, 245 ff, goal of, 249.

- Existence, levels of, 65; eternal 85.
 Experience, Absolute, 220, 390, 396 f.
 Experientialism, organic, 194.
 Ezekiel, 365.
- Fallacies, 23.
 Fechner, 191 f.
 Feudalism, 150.
 Fichte, 156, 188, 193, 219, 253, 262, 356, 369.
 Final, cause, 68.
 Finality, 278 ff.
 Forces, love and hate, 37.
 Form, in Plato, 61; 78; in Aristotle, 85 ff.
 Foundations, of Christian philosophy, 129.
 Freedom, 196, 249.
- Galileo, 152, 153, 183, 186, 302.
 Cassendi, 90.
 Genesis, 20.
 Geometry, 239.
 Gnostics, 367.
 Goal of evolution, 249.
 God, 67; the one pure form, 78; first cause, 86; epistemological device, 172, 181 ff.; Olympian, 236; meaning of, 342; 355; 371.
 Godhead, 115, 123, 130.
 Goethe, 369.
 Good, the, 64; idea of, 67, 361; in Aristotle, 87; in Plato, 87; Democritus' theory of, 93.
 Gospel, 125.
 Graeco-Roman, 123.
 Green, 156, 183.
 Gumplowicz, 375.
- Haeckel, 156, 191.
 Haldane, 241.
 Hamiltonian, 200.
 Hate and love, 37.
 Hegel, 34, 156, 157, 183, 203, 204, 210 ff., 253, 261, 271, 286, 294 ff., 316, 320, 356, 369 ff., 400.
- Hegelian, doctrine, 206; conception of Absolute, 210.
 Heraclitus, 33; on strife, 34, 40; 230.
 Herder, 233, 368 ff.
 Hesiod, 20.
 Heymans, 191.
 History, philosophy of, 364 ff.; logic of, 377; metaphysics of, 377.
 Hobbes, 90, 156, 233, 294, 356, 368.
 Holbach, 156.
 Holt, 390, 397.
 Holy Spirit, 123.
 Homer, 20.
 Hume, 151, 254, 271, 275, 294 ff., 316, 356, 368.
 Huxley, 90, 230, 234 ff.
 Huyghens, 183, 186.
 Hylozoism, 32.
 Hymn to Zeus, 113.
 Hypotheses, working, 106.
- Idealism, types of, 178; Hegelian, 188; Berkeleyan, 178; teleological, 194; 300, 308, 354, 359 ff.; objective, 304, 390 ff.
 Ideas, in Plato, 61; Locke and Berkeley, 61; transcendence of, 64; immanence of, 64; of values, 65.
 Identity theory, 156 ff., 191 ff.
 Ignorance, nature of, 1.
 Illusions, 35.
 Image, divine, 110.
 Imagination, in primitive thinking, 17 ff.
 Immanence, of formative principles, 78; of God, 109 ff.; see Singularism.
 Immortality, in the Phaedo, 70.
 Incarnation, 130.
 Individual, 78, 85.
 Individualism, 197.
 Individuality, 140, 245, 278 ff.
 Infinite, 101.
 Inge, 116.
 Inquiry, 106.

- Instrumentalism, on intelligence, 399 ff.
 Intelligence, 39.
 Intent, 127.
 Intuition, 119. Intuitionism, 403 ff.
 Invention, 368.
 Ionians, 30 ff.
 Irenaeus, 367.
 Irreversibility, 246.
 Isaiah, 200, 365, 378.

 Jakweh, 286, 351.
 James, Saint, 169.
 James, William, 119, 151, 157, 158, 182, 201, 254, 304, 315, 317; quoted, 319 ff.; 232, 357, 339, 396 ff.
 Jehovah, 200, 365 ff.
 Jeremiah, 365.
 Jesus, 127.
 Job, 218.
 Johnson, Doctor, 181.
 Jonah, 306.
 Justice, 248.
 Justin Martyr, 120.

 Kant, 151, 186, 211, 225, 253, 262; on categories, 271; 275, 290, 294 ff, 316, 330, 356, 360.
 Kepler, 152, 186.
 Knowledge, problem of, 41; Aristotle's theory of, 77 ff; Plato's theory of, 55; and reality, 305; ideal of, 328; objects of, 345.

 Laissez Faire, 197.
 Lamarck, 230, 235.
 La Mettrie, 156.
 Law, natural, 83; of thought, 106; 298 ff.; Roman, 112.
 Lecky, 364.
 Leibnitz, 113, 149, 151, 156, 158, 182, 191, 192, 222, 272, 294 ff., 356, 368.
 Lessing, 369.
 Leucippus, 37.
 Liebmann, 183.

 Locke, on idea, 61; 149, 151, 156, 158, 169, 171, 253, 271, 294 ff., 316, 356, 368.
 Logic, 344 ff.
 Logos, 33; New Testament, doctrine of, 68; 110, 117, 125, 128; and Father, 129.
 Lotze, 156, 161.
 Love, and hate, 37; Platonic, 122; intellectual, 123.
 Lucretius, 90.
 Luther, 136.
 Lyceum, 77.

 Mack, 157, 254, 306, 396.
 Magic, 12; and science, 12 ff.; and religion, 13; kinds, 14; black and white, 16.
 Man, his good, 87; the measure of things.
 Manichaeism, 184, 367.
 Mars' Hill, 113.
 Martyr, Justin, 367.
 Marvin, 303 ff.
 Marx, Karl, 374.
 Materialism, 89, 156, 173 ff.
 Mathematics, pure, 301.
 Matter, 37, Plato on, 62; 73, 79; contingent, 86; 168.
 McDougall, William, 156.
 McTaggart, 221.
 Mechanism, 89, 152, 244, 247.
 Metaphysics, 270 ff., task of, 226; its nature, 330.
 Meta-psychology, 330.
 Micah, 366.
 Middle Ages, 131.
 Might, is right, 46.
 Miletus, school of, 30.
 Mill, J. S., 294, 356.
 Mind, and matter, 40; and body, 303.
 Modalists, 131.
 Monad, 183.
 Monadology, Leibnitzian, 182 ff.
 Monism, epistemological in Aristotle, 83; neutral, 156, 306 ff.

- Monisms, qualitative, 187; neutral, 396 ff.; objections to neutral, 396 f.
 Monophysite, 180.
 Monothelitism, 181.
 Montague, 393.
 Morality, 253.
 Moses, 126.
 Motion, Zeno on, 36; paradox of, 101.
 Motive, 127.
 Mover, God as universal, 86.
 Multiplicity, 84.
 Mutation, 326 ff.
 Mysteries, Orphic, 116.
 Mystic way, 115.
 Mysticism, 115.
 Myth, types of, 18; Persian, 19.
 Mythology, 17 ff.
 Nature, philosophy of in Aristotle, 80.
 Natures in Christ, the two, 181.
 Necessitarianism, 198.
 Negatio, 209.
 Negative, 370.
 Neo-Platonism, 115; its failure, 123.
 Neo-Pythagoreans, 117.
 New Realism, 389 ff.
 Newton, 152, 186.
 Nicaea, Council of, 129.
 Nietzsche, 239.
 Nominalism, 140.
 Non-Euclidian, 239.
 Notions, general, 110, 178.
 Nous, of Anaxagoras, 39; in Plato's theory, 70.
 Novalis, 207.
 Occam, William, 138, 142, 145, 148.
 One, the, 35; and all, 35; 120, the eternal, 204 ff.
 Origen, 118, 129.
 Opposites, unity of, 149.
 Order, 280 ff.
 Organization, 246.
 Orphic, cosmogony, 20; mysteries, 120.
 Orthodox, 131.
 Othering, process of, 311.
 Pantheism, Stoic, 106; definition of, 106.
 Paracelsus, 148.
 Paradox, 102.
 Parallelism, psycho-physical, 191.
 Parmenides, the One, 31; 35.
 Particulars, relation to universals, 60; definition of, 66 ff.
 Patristicism, 180.
 Paul, Saint, 118, 232, 367.
 Paulsen, 191.
 Pawlow, 241.
 Pearson, 254, 306.
 Perception, Plato on, 56; 93, untrustworthiness of, 102; act of, 110.
 Perception petite, 185.
 Perry, R. B., 390, 397.
 Personality, 198 ff.
 Phaedo, 231.
 Phenomenalism, 82.
 Philo, 117, 125, 126.
 Philosopher, his activity, 1.
 Philosophy, defined, 1; and science, 2 ff.; aim of, 2; and practical life, 4 ff.; and religion, 6; main problems of, 6; and poetry, 7; rise to independence, 22 ff.; development of, 31 ff.; defined, 108; early Christian, 125; Mediaeval, 133; modern, 148; and psychology, 331 ff.; social, 336 ff.
 Plato, on the philosopher, 1 ff., 74 ff.; on knowledge, 1; on Homer, 20; relation to Socrates, 43; and Academy, 44; method of, 55; theory of knowledge, 55; problems of, 55; versus Sophists, 55; reminiscence, 56; on perception, 56; criticised by Aristotle, 64; on creation, 68; on the soul, 69; ethics, 70; communism, 63; on the state, 78; eugenics, 75; 126, 128, 136, 227, 228, 230, 249, 256, 272, 316, 323, 333, 356, 373, 400.

- Platonism, 117.
 Plotinus, 115, 118 f., 123, 355.
 Pluralism, 64; and singularism, 195, ff.
 Pluralist, 195.
 Plurality, 36.
 Plutarch, 117.
 Pneuma, 110.
 Poetry, and philosophy, 7.
 Politics, and ethics, 87.
 Possibility, 164.
 Postulates of Greek thought, the two, 109; of knowledge, 327.
 Potentiality, in Aristotle, 78; 118.
 Pragmatism, 315; on ideas, 316; absolute, 323.
 Priestley, 156.
 Primitive world view, 9; breakdown of, 22, 26.
 Principle, vital, 341.
 Principles of truth, 106.
 Probability, degrees of, 100.
 Problem, of conduct, 41; of knowledge, 41; of religion, 41.
 Process, cyclic, 246.
 Protagoras, homo mensura, 45.
 Psalmist, 105.
 Psyche, 119.
 Psychology, 331 ff.; and philosophy, 333 ff.
 Purification, 122.
 Purpose, 244; universal, 359; world, 373.
 Pyrrho, 99.
 Pyrrhonic skepticism, 100.
 Pythagorean, brotherhood, 116.

 Quadrivium, 136.
 Qualities, secondary, 98, 104, 169 ff.
 Quantities, 104.

 Ranke, 364.
 Rationalism, 84.
 Ratzenhofer, 375.
 Realism, 140; types of, 141 ff.; naive, 305; representational, 306; transfigured, 307; critical, 308.
 Realists, new, 157; extreme, 227.
 Reality, Aristotle on, 85; problem of, 155; 247, 305 ff.; absolute, 357; purpose of, 383, 391.
 Reason, 70; creativity of, 81; 110; divine, 125.
 Redemption, social, 248.
 Reformation, 150.
 Relativity, 104.
 Relations, 57, 392 ff.
 Relativism, agnostic, 351.
 Religion, nature of, 5; relation to philosophy, 6; philosophy of, 341.
 Reminiscence, Plato on, 56.
 Renaissance, 150.
 Revolution, French, 124, 150.
 Renouvier, 271.
 Ribot, 199.
 Rickert, 358, 276.
 Roman, Empire, 108; law, 112.
 Romans, 96.
 Rome, Bishop of, 135.
 Roscellinus, 142.
 Rousseau, 233.
 Royce, 156, 157, 186 ff., 188, 204, 210, 215, 219, 253, 254, 320, 322, 357.
 Ruskin, 341.
 Russell, B., 156, 390.

 Sabellians, 131.
 Same, 130.
 Salvation, 129.
 Sarx, 119.
 Savior, 125.
 Schopenhauer, 156, 356.
 Schelling, 157, 191.
 Schiller, 369.
 Science, and philosophy, 3; problem of, 23; origins in Greece, 30; experimental in Greece, 96.
 Scotus, Duns, 136, 138, 144, 148.
 Selection, natural, 236.
 Self, 252 ff.; Hume on, 254; Calkins on, 254; Plato on, 256 ff.
 Self determination, 246.
 Seneca, 109.

- perception, untrustworthiness
 102.
 , Parmenides and Zeno on
 , 36.
 r, 186, 196, 341.
 l, 376.
 29, 249.
 Mount, 351.
 arism, and pluralism, 195 ff.,
 .
 arist, 196.
 ism, Pyrrhonic, 100; reply to,
 ; 99.
 Philosophy, 336 ff.
 es, 43 ff.; relation to Plato,
 charges against, 48; method
 48 ff.; theory of conduct, 49;
 definitions, 49; conception of
 edness, 52; attitude toward re-
 ion, 53; 126, 231.
 rity, 248.
 p, divine, 127.
 37, 287 ff.
 ts, 44.
 primitive idea of, 9 ff.; and
 ly, 10; Plato on, 69; and body,
 ff.; atomistic conception of,
 cosmic, 120, 246.
 r, H., 157, 191, 212, 239, 307,
 , 375.
 a, 118, 149, 157, 191, 193,
 ff., 214, 216, 261, 272, 356,
 , 394.
 10; pure, 106; universal, 122;
 ly, 123.
 alism, 156, 178.
 rds, 106.
 70.
 antheism, 108.
 Heraclitus on, 40.
 nce, 31, 156, 167; definition
 206; 272 ff.
 ng, 348.
 a Theologia, 37.
 aturalism, 351.
 tion, 23 ff.
 thy, 127.
 of universals, 67.
 Tabu, 11 ff., 14.
 Taine, 364.
 Talleyrand, 124.
 Teleology, of Plato, 63; in nature,
 78; 85; problem of, 230, 244.
 Tennyson, quoted, 201 ff.
 Tertullian, 367.
 Testament, New, 118.
 Thales, 30 ff., 199, 272.
 Theism, 109.
 Thermo-dynamics, 162.
 Thomson, J. A., 241.
 Thoreau, 341.
 Thought, laws of, 298.
 Timaeus, 136.
 Time, 85, 225, 285 ff.
 Topsy, 234.
 Totemism, 11.
 Transcendence, of ideas, 64; 78.
 Trinity, doctrine of, 129.
 Trivium, 136.
 Troeltsch, 376.
 Truth, determination of, 106; cri-
 teria of, 314 ff.; theories of
 314 ff.
 Truths ,the four noble, 122.
 Unconscious adaptation, 244.
 Underhill, Miss, 116.
 Unio Mystica, 218.
 Union, with God, 122.
 Units, 101, 196.
 Unity, 120.
 Universal, in Plato, 58 ff.; relation
 to particulars, 60; system of, 67;
 abstract, 372.
 Upanishads, 208.
 Uranus, 302.
 Valuation, 346 ff.
 Values, the fundamental, 5; 246;
 status of, 345; types of, 346 ff.;
 Schopenhauer on, 356.
 Vico, 368.
 View, Athanasian, 130.
 Virtues, cardinal, 71; practical and
 theoretical, 87.
 Voltaire, 219.

Von Hartmann, 271.

Von Huegel, 116.

Wallace, 230.

Ward, James, 158.

Whitman, 341.

Will, primacy of, 145; to live, 262;
to power, 262.

Wilson, President, 161.

Windelband, 358, 376.

Word, 123.

Wordsworth, quoted, 57, 156, 339,
341.

World history, 248.

World, Stoic conception of, 109.

Wundt, 262, 375 ff.

Xenophanes, 35.

Zeno, puzzles of, 36, 308.

Zeno, the Stoic, 101.











